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M-SPHERE ASSOCIATION FOR PROMOTION OF MULTIDISCIPLINARITY IN SCIENCE AND BUSINESS

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Promote multidisciplinary approach by encouraging and providing the circumstances to exchange of experiences and ideas from different disciplines, in order to further encourage scientific curiosity in research and practical work, with the aim of achieving positive change in all spheres of science and business – respecting multidisciplinarity.

OBJECTIVES
Acquiring of conditions for achieving a permanent mission of the organization of annual conferences, publishing journals and various forms of education.

VISION
Become a focal point of advocacy for multidisciplinary approach science and business.

GUIDING PRINCIPLE
IDEAS WORTH TO SPREAD – RESULTS WORTH TO DISSEMINATE
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ABSTRACT
Seniors represent an important and growing market segment for retailers, particularly in the food retailing. Exploration of seniors needs and wants is needed because of their different concerns and desires to compare with younger people when they choose shopping places and stores. Such attributes as store location, internal store environment (trolleys, display policy, assortment), price policy, staff behaviour or easy access to the store are differently perceived by older shoppers. Responding to the requirements of seniors’ segment in these attributes can build the trust to particular retailer and cause satisfaction of older shoppers. The purpose of our paper is to propose a framework that can be used to develop clear and conceptually consistent, context-specific system of satisfaction assessment with the shopping experience of older people. In particular we suggest a measure of the satisfaction level with the shopping experience and discuss the areas of satisfaction and perceived dissatisfaction in order to develop the trust in older consumers segment. We raise question: ‘what are the areas in which seniors perceive dissatisfaction when shopping foodstuffs”. We also explore the influence of age and seniors’ health condition on the level of satisfaction. To measure the food shopping satisfaction, 12 factors of internal and external store environment were reviewed by a random sample of senior respondents and respondents were asked to rate the factors according to that food-store, in which they regularly / most frequently conduct their shopping. Results indicate that there is a general trend towards satisfaction, however also some areas of dissatisfaction were identified, such as aspects of the price policy, internal store environment or courtesy of staff. This suggests that retail managers should pay increased attention to seniors, as not all older consumers consider their needs to be satisfactory met. The research in this paper was conducted within the Research project VEGA 1/0612/12 “Determinants of level and trends in consumer behaviour and consumption of the seniors in Slovak Republic”.

KEYWORDS: Satisfaction, Retail store, Seniors, Shopping experience.

1. INTRODUCTION
The paper presents the findings of the research into development of shopping satisfaction of older people. We come to the conclusion that there are still segments of elderly consumers that cannot be ignored, with neglected areas of dissatisfaction.

Seniors have been traditionally viewed as an unattractive market due to the perception that they had small income and spending power and the image of old people being frail. However, this perception seems to be shorteyed, because not only is this market constantly growing, but also new pensioners with higher income / pension will treat into the segment (Lesakova, 2013). To justify studying the seniors’ age group, there are a number of factors that differentiate elderly from other segments. These factors depend on changes in health and psychographic characteristics which result in specific shopping and interior store needs (Sandor, 1994). Within the existing literature there is agreement that lower prices, attitudes of service staff, avoiding long queues at checking points and accessibility of products on shelves are particularly important to seniors shopping. It is also important for seniors that shopping places are clean and have easy Access (Moschis, 2003, 2004).

In following sections factors influencing seniors satisfaction with food shopping stores are presented, based on the results of empirical research.

2. TRUST AND SATISFACTION IN SHOPPING PROCESS
The core of the marketing strategy is to identify the effective ways of serving customers and satisfying the customer needs. Satisfying the customers is an essential goal of the whole business. Companies satisfying their customers achieve better results, while those with dissatisfied customers, fail. These findings are valid across consumer goods, services and store selection (Giese, 2000). Customer satisfaction in general is the customer’s evaluation (from good to bad, from pleasant to unpleasant) of a specific purchase or shopping experience. This means, satisfaction is how the customer feels about a specific product, store or shopping experience.

Customers evaluate shopping experiences and arrive at „satisfaction judgments“ by comparing what they really received with their expectations (Schiffman & Kanuk, 2010). This framework has been tested many times: customers form judgements of satisfaction by comparing what they get to what they expected (Payne, 2008). Research has confirmed that
satisfaction is an important variable driving positive word of mouth and loyalty. Loyalty as a tendency of customers to stay with a store or a brand, is closely related to firm profitability. The dissatisfaction of consumers can result in negative word of mouth and lost sales. Building satisfaction is especially important in the retail sector.

Four key areas for building satisfaction in shopping process have been identified in the existing literature: product-related aspects, internal store environment, staff service, and store accessibility. Within the store environment, critical aspects have been reported in the use of some facilities, such as large trolleys or large baskets (Mogelonsky, 1995). Also difficulties with readability of product labels or price displays on shelves were identified to be important for satisfaction (Moschis, 1991; Goodwin et al., 1999). Several studies indicated that seniors had problems to reach high and low shelves and to use deep freezers (Moschis, 2003; Moschis, 2004). Older shoppers indicated that in such cases they either did not purchase the item or had to ask the staff for the help. Research among the oldest seniors found that older people expect seats in stores when they feel tired.

Location of products on shelves and ease of finding products are very important. Retailers often move the products around the store as a part of their business and display policy in order to force the customers to walk around the whole store. This was criticised not only by older consumers but also by younger consumers (Oates et al., 1996; Lesakova, 2013). Long queues at check-outs have been declared in numerous studies as causing dissatisfaction in older consumers (Goodwin & McElwee, 1999). Products related aspects are in generally very important for both older and younger consumers (Lumpkin, 1985; Schewe, 1988). However, differences exist in the importance attached by various segments to particular product aspects.

Price level is recognised as one of the most important factors to older people, particularly for those with low incomes (Lesakova, 2013). Older consumers are very price sensitive. Price was the most influential factor, central to the vast majority of seniors for their store choice. Seniors are focused on price and actively seek out products with lowest possible price. They are prepared to travel a lot during the day in order to get the minimal price. The importance of the price goes up with higher age. Older people like to use discount stores and stores with frequent sales events as they prefer to shop in stores with lower prices. Lambert (1979) reported that people with low incomes were forced to compromise the quality for price.

One aspect of dissatisfaction which was frequently reported, was the quantity of packaged food. The quantities of food which are normally packaged were reported as being too large for older people with smaller appetite, especially when the food is bought for one senior person (Moschis, 1997).

An important area in ensuring satisfaction among older consumers is the knowledge and courtesy of the staff (Lesakova, 2012). This regards the availability of staff ready to help with locating products, information on products and advising on product attributes (Goodwin et al., 1999). Just as staff can bring satisfaction, it can also cause dissatisfaction when they are unfriendly and unhelpful (Peterson, 1992).

Differences exist between various branches of retailing in the factors influencing trust and satisfaction of older consumers. Moschis et al. (1997) found such factors as store distance from the home, brands familiar to seniors and fast check-outs to be important for food shopping. Factors such as hygiene, cleanliness, familiarity of layout, quality and low prices have been declared to be important for both older and younger age segments (Lumpkin, 1985; Lambert, 1979).

Hence, there appears to be a broad range of factors influencing the satisfaction of older consumers. In following sections these factors will be explored in relation to the level of their importance for satisfaction and differences among the age subsegments will be explored.

3. METHODOLOGY AND GOALS

The purpose of this paper is to propose a framework that can be used to assess the satisfaction with the shopping experience of older people. In order to serve seniors effectively, retailers need a clear understanding of the seniors needs and wants (Buttle, 2004).

Specifically, we will measure the satisfaction level with the shopping experience, discuss the areas of satisfaction and perceived dissatisfaction of older consumers in the shopping process and finally we explore the influence of age and seniors’ health on the level of satisfaction. The core of the paper is to find out the areas in which seniors perceive satisfaction and the areas in which they perceive dissatisfaction when shopping food products.

A three-step approach was used to discover and formulate the areas of senior’s shopping satisfaction. First, a literature review was conducted to indicate general consistencies and specific inconsistencies in the attributes influencing shopping experience. Second, focus group interviews delivered introductory data to get a deeper insight into development of satisfac-
tion specific to the foodstuffs / grocery stores. The group interview sample consisted of 8 seniors. After a brief description of the research project, participants expressed their opinions about attributes important to the store choice. Respondents were first asked to recall previous purchase situation and to describe when / where they felt good (did not feel good) and to use their own words to describe such situation. The purpose of this was to generate many responses across various situations and to determine similar and typical features. Focus group interviews provided the base for the third - questionnaire phase. A total of 165 questionnaires were collected from the respondents aged 65+ and participating in the food shopping. The profile of respondents is given in Table 1. Finally, in order to determine the general outcomes from the research, differences in seniors population regarding their perceived health and chronological age were determined.

To measure the food shopping satisfaction, 12 factors were selected and respondents were asked to rate the factors according to that food-store, in which they regularly / most frequently conduct their shopping. A five-point scale was used to evaluate the factors, ranging from 1 = very dissatisfied to 5 = very satisfied. Application of scales to measure satisfaction is a common method, as it enables grading of opinion.

The indicators of median and interquartile range were used for measuring the central tendency and spread to present an overview of the results. The interquartile range gives a more detailed picture of the levels of satisfaction within the sample. The minimum and maximum values are also mentioned in the research in order to identify whether the full range of scale has been used by respondents. In order to evaluate the levels of satisfaction accurately, frequencies were used. This means that the levels of dissatisfaction were not „hidden” by most of the positive data. In order to explore the influence of age and perceived health condition of seniors, the Mann-Whitney-U test was carried out. This is a statistical test for a variable measured on an ordinal scale, comparing the differences in the mean values of two populations based on observations from two independent samples. The comparison between two samples based on the sum of the ranked scores indicates the number of times a score from one of the samples is ranked higher than a score from the other sample.

4. RESULTS

In order to present an overview of the data, the median and inter-quartile range of the satisfaction ratings were calculated (see Table 2), where 1 = very dissatisfied and 5 = very satisfied. Point 3 on the scale indicates „neutral”, which means „neither satisfied, nor dissatisfied”.

Table 1. Respondents characteristics

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>(n = 165)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>65 -74 years</td>
<td>48</td>
<td>28</td>
</tr>
<tr>
<td>75+ years</td>
<td>52</td>
<td>32</td>
</tr>
<tr>
<td>Health</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health limits in my shopping</td>
<td>55</td>
<td>35</td>
</tr>
<tr>
<td>No health limits in my shopping</td>
<td>45</td>
<td>30</td>
</tr>
</tbody>
</table>

Source: own calculation

The results were spread across the full range of the 5-point scale applied and fell predominantly in rating 4, indicating a degree of satisfaction. However, the Table 2 also shows that for all factors included in the process of assessment, the full range of scale values was used, except for price and quality of products where the minimum and maximum were 2 and 5. This result reveals that older consumers used the full 5-point range and that also dissatisfaction was expressed, despite the majority indicating satisfaction, which is documented in the inter-quartile range.

The frequency of responses seems to be the best method for analysing the actual results of the data. Table 3 presents details of the frequencies for each factor and it indicates that there are some areas, such as price, store facilities, quality of products or courtesy of staff that cause dissatisfaction for more than a quarter of respondents. Price was found to be the most critical factor with nearly 50 per cent respondents being „very dissatisfied” and „quite dissatisfied”.
4.1. Areas of satisfaction

Satisfaction is spread across all factors explored. The choice and promotion of products was found to be satisfying, with a tendency to be more „quite” satisfying rather than „very” satisfying. This factor was found to be ranked best among product related aspects. Similar patterns were found in some aspects of internal store environment, especially in readability of tags on shelves with 65 % satisfied shoppers. Two aspects of internal store environment were found to be very satisfying (hygiene and cleanliness with 77 per cent „very” and „quite” satisfied shoppers and fast check-outs with 77 per cent „very” and „quite” satisfied shoppers), with the highest ranking and median value of five. Differences in the rates between first and third quartile in the factors of store facilities or display of products indicate that there are different subsegments within our sample with different expectations and perception of satisfaction. Two aspects of staff service are perceived differently, with knowledge been assessed mostly as „quite” and „very” satisfying, while the courtesy received lower ratings of satisfaction with 30 % of „very” and „quite” dissatisfied shoppers. These aspects have been identified as important also in other studies (Oates et al., 1996; Lumpkin et al., 1985; Moschis, 1997) and indicate that these factors have a crucial impact on a positive shopping experience in mature consumers segment. Courtesy appears to be an area requesting more attention and staff training, as it is important to the seniors.

Others to our expectations, accessibility was assessed positively in contrast with problems cited in the literature. However, satisfaction with access may vary depending on the type of store.

Table 2. Summary of satisfaction data

<table>
<thead>
<tr>
<th>Main factor</th>
<th>Sub-factor</th>
<th>Median</th>
<th>Inter-quartile range</th>
<th>Min-max</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>25</td>
<td>50</td>
</tr>
<tr>
<td>Products related aspects</td>
<td>Choice of products</td>
<td>4</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Quality of products</td>
<td>3</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Price</td>
<td>3</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Promotions</td>
<td>4</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Internal store environment</td>
<td>Display of products</td>
<td>4</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Store facilities (troleys, baskets)</td>
<td>4</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Readibility of tags on shelves</td>
<td>4</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Hygiene and cleanliness</td>
<td>5</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Fast check-outs</td>
<td>5</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>External store environment</td>
<td>Accessibility</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Staff aspects</td>
<td>Knowledge</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Courteousy</td>
<td>3</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

Source: own calculation
Table 3. Percentage of respondents rating factors for satisfaction

<table>
<thead>
<tr>
<th>Main factor</th>
<th>Sub-factor</th>
<th>Very satisfied</th>
<th>Quite satisfied</th>
<th>Neutral</th>
<th>Quite dissatisfied</th>
<th>Very dissatisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Products related aspects</td>
<td>Choice of products</td>
<td>27,3</td>
<td>44,8</td>
<td>21,8</td>
<td>4,3</td>
<td>1,8</td>
</tr>
<tr>
<td></td>
<td>Quality of products</td>
<td>-</td>
<td>27,8</td>
<td>45,6</td>
<td>17,6</td>
<td>9,0</td>
</tr>
<tr>
<td></td>
<td>Price</td>
<td>-</td>
<td>13,4</td>
<td>37,6</td>
<td>26,6</td>
<td>22,4</td>
</tr>
<tr>
<td></td>
<td>Promotions</td>
<td>7,9</td>
<td>63,1</td>
<td>17,5</td>
<td>10,3</td>
<td>1,2</td>
</tr>
<tr>
<td>Internal store environment</td>
<td>Display of products</td>
<td>11,1</td>
<td>40,4</td>
<td>19,1</td>
<td>23,7</td>
<td>6,7</td>
</tr>
<tr>
<td></td>
<td>Store facilities (troleys, baskets)</td>
<td>11,6</td>
<td>39,2</td>
<td>20,1</td>
<td>19,3</td>
<td>9,8</td>
</tr>
<tr>
<td></td>
<td>Readibility of tags on shelves</td>
<td>12,6</td>
<td>52,3</td>
<td>18,1</td>
<td>10,9</td>
<td>6,1</td>
</tr>
<tr>
<td></td>
<td>Hygiene and cleanliness</td>
<td>55,8</td>
<td>21,7</td>
<td>14,0</td>
<td>5,5</td>
<td>3,0</td>
</tr>
<tr>
<td></td>
<td>Fast check-outs</td>
<td>54,8</td>
<td>22,2</td>
<td>15,2</td>
<td>4,2</td>
<td>3,6</td>
</tr>
<tr>
<td>External store environment</td>
<td>Accessibility</td>
<td>30,2</td>
<td>45,5</td>
<td>7,9</td>
<td>9,1</td>
<td>7,3</td>
</tr>
<tr>
<td>Staff aspects</td>
<td>Knowledge</td>
<td>31,5</td>
<td>44,8</td>
<td>17,1</td>
<td>3,0</td>
<td>3,6</td>
</tr>
<tr>
<td></td>
<td>Courteousy</td>
<td>14,0</td>
<td>21,3</td>
<td>34,3</td>
<td>15,2</td>
<td>15,2</td>
</tr>
</tbody>
</table>

Source: own calculation

4.2. Areas of dissatisfaction

While the general trends in the research findings show medium satisfaction, there are also areas of dissatisfaction. A remarkable area of dissatisfaction can be found within two products-related factors: quality of products and price. Less than 14 percent expressed small satisfaction with price policy. Two aspects cause a high level of dissatisfaction in this area: low income (pension) of seniors and high tax-level on foodstuffs. Nearly half of all respondents expressed high and medium level of dissatisfaction. Dissatisfaction was expressed with poor availability of cheap foodstuffs. However, this can depend on the type of the store selected for shopping.

Within internal store environment, areas of dissatisfaction have been display policy, indicating that stock was moved around the store and the store facilities. This can again be linked to the type of store used for shopping.

4.3. Differences among subsegments

The research data were tested for differences in satisfaction across two factors of perceived health and age. Mann-Whitney U-tests were carried out to determine the differences. Significant results were found regarding both two factors. As for health, there were three factors that were of significance, as Table 4 indicates.

Seniors who experienced some handicaps in their food shopping due to health problems, expressed more often dissatisfaction with internal store environment and store accessibility, than seniors whose health did not limit them. This seems expected, as people with health problems likely require special facilities, such as seats to rest or smaller trolleys and it also indicates that satisfaction may vary according to different age subsegments of the seniors’ population (Abdel-Ghany, 1997).

This was also found in accessibility factor, which was rated as satisfying by seniors with no health limitations in comparison to seniors with health problems. The research results indicate clearly that people who are limited by health are more likely to have a dissatisfying shopping experience, mainly due to store environment and store accessibility.

Comparing the mean ranks of younger (65-74) and older (75+) shoppers delivers a result that there are two factors which are significant, as can be seen in Table 5. Older consumers were more likely to be dissatisfied with the readability of tags on shelves and with the price level of foodstuffs.
Table 4. Significance of „limitations of health“ and „ratings of satisfaction“

<table>
<thead>
<tr>
<th>Factor</th>
<th>Mean rank</th>
<th>Significance of Mann-Whitney U-test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Limitation in health status</td>
<td>No serious limitation in health</td>
</tr>
<tr>
<td>Store facilities</td>
<td>28,91</td>
<td>39,04</td>
</tr>
<tr>
<td>Display of products</td>
<td>26,90</td>
<td>39,32</td>
</tr>
<tr>
<td>Access to stores</td>
<td>27,36</td>
<td>37,18</td>
</tr>
</tbody>
</table>

*Significant at the 0,05 level

Table 5. Significance of „age“ and „ratings of satisfaction“

<table>
<thead>
<tr>
<th>Factor</th>
<th>Mean rank</th>
<th>Significance of Mann-Whitney U-test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>65-74 years</td>
<td>75+ years</td>
</tr>
<tr>
<td>Readability of tags</td>
<td>23,17</td>
<td>31,98</td>
</tr>
<tr>
<td>Price level</td>
<td>27,13</td>
<td>43,69</td>
</tr>
</tbody>
</table>

*Significant at the 0,05 level

5. CONCLUSION

The results of our research reveal the dissatisfaction with some factors influencing the shopping experience of seniors and indicate that not all expectations of older people have been met. Five out of twelve factors in the research were identified as not meeting fully the needs of older shoppers. Even though there was a general trend towards satisfaction, only few factors tended to appear as „very” satisfied or „quite satisfied”, indicating areas for improvement. Retail managers should pay attention to the price policy and to the internal store environment if they want to gain the trust of senior’s segment.

The findings indicate that the critical areas of dissatisfaction vary according to age subsegments of the older people. It is therefore important that retailers pay attention to the different needs and expectations of various age subsegments and do not simply see the seniors as a homogeneous group. Areas that were particularly positive, were: promotions of food-stuffs, the hygiene and cleanliness in the store, fast check-outs and knowledgeable staff. Aspects of dissatisfaction focused on: price level, display policy, store facilities and courtesy of staff. These areas call for improvement by retailers.

Special needs of seniors need to be recognised not only by retailers, who seek to increase their business success, but also by policy makers who seek to improve the retailing as a business branch.
LITERATURE


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ABSTRACT
Organizational changes are the sole possibility for increasing the company’s business competitiveness. A successful outcome of changes depends on the relevance of the responses to the questions what, how and when to change, how to cope with the predictable and unpredictable ramifications of change implementation, and how to manage the diversity of simultaneous and mutually interwoven changes such as are required by most transformations. The paper aims to indicate at the cluster approach whereby Croatian managers and entrepreneurs in the SME sector, may, through their decisions, modify and enhance the competitiveness of their enterprises. The paper’s underlying hypothesis is that Croatian SME producers of cocoa, chocolate and candies, insufficiently utilize the possibilities of strengthening the competitive advantage, i.e. they do not use the advantages of affiliations and the cluster business model. Empirical research and processing data of the Croatian Chamber of Economy, provided indicators of the structure and dynamics in headcount, assets, income, export, profit and loss of the specified activities and overall Croatian economy. Indicators were analyzed and the competitive position of SME in the group at the end of the concerned period was determined. Proposed and explained in this sense is the cluster development model among SME candy producers in the Republic of Croatia. Through networking they would strengthen their competitive capacities and move the development on a local and regional level.

KEYWORDS: cluster, competitiveness, SME confectionery producers, organizational change.

1. INTRODUCTION
Shifting a business activity from the current into a new position is an extremely demanding and uncertain procedure. Starting up the tiny wheels calls for coordinated team efforts and a multidisciplinary approach. Studying change management and SME affiliations through joint activities (cluster approach) offers the possibility for integrating, not only of a line of managerial areas, such as learning within an organization, developing good communication, team building and efficient human resource management, but also for the affiliations, namely joint actions in the areas of (Horvat, Kovačević, 2004):

1. promotions and marketing;
2. supply of raw and production materials;
3. distribution and maintenance;
4. training and developing expert human potentials;
5. organized structures affiliations;
6. techniques development, and competition awareness.

The paper’s objective is to point at the meaning of, and the requirement for, affiliating, forming networks, namely creating SME alliances (clusters) whereby they would operate jointly and develop through the use of communication, technologies and investments from other regions and thus ensure the creation of added value chain.

The purpose of this paper is to establish theoretical and practical advantages of forming networks and associating through founding clusters of the Croatian producers chocolate and candies.

Business enterprises achieve the reinforcement of sustainable competitiveness by associating into a cluster, via common activities in different areas of work, small and medium sized entrepreneurship reduces costs, increases added value and new market possibilities, innovations are prompted as well as training, additional links to the market and the wider environment are established, different activities are joined together, namely: designing, research, technological processes development, organizational redesign and expert training.
2. Status and Prospects of the SME Sector in Croatia

Small and medium sized enterprises (hereinafter: SME) represent an important part of any economy. In 2012, SMEs in Croatia realized a share of 51% in the total income, 67,04% in employment and 43,06% in Croatia’s export (CEPOR, 2013). In the period 2009 – 2012, in the SMEs:

- total income shrank by 3,14% while the share in the Croatian economy structure was reduced by 1,98%;
- headcount was reduced by 3,53% while the share of employees in the Croatian economy structure was decreased by 1,33%;
- strong growth of 51,44% was recorded in export, while the share in the Croatian economy structure does not show such a strong growth, rather an increase of 3,83%.

International research (Global Entrepreneurship Monitor, Doing Business, Report on Global Competitiveness, Corruption Perception Index) indicate the chief problems of the SME sector in Croatia, namely: insufficiently intensive activity in starting new business undertakings, a small portion of growing enterprises, resilient administrative barriers for realizing the entrepreneurial activities, underdeveloped finance market, and a shortfall of training focused on developing entrepreneurial knowledge and skills.

A drop of GDP rate by 0,4% and an increment of the unemployment rate by 10,5% in the EU in 2012 (CEPOR, 2013) have a substantial impact on the Croatian economy since the largest part of Croatia’s product exchange, foreign tourists’ arrivals and overnight stays, and direct foreign investment in Croatia refer to the countries members of the EU.

2012 witnessed a weakening of the Croatian economy; with only 61% of European Union’s GDP average, Croatia is categorized as the third least developed country member (after Bulgaria and Romania) with the fourth highest unemployment rate (after Greece, Portugal and Spain) and the lowest employment and business activity rates (Croatian Chamber of Commerce, 2013).

Croatia should direct its focus onto the SME sector which can, as the toughest part of the economy, in a more favorable business environment and with a raise of competitiveness, ensure the highly desired growth and new work places. The matter of performance of this part of the economy is more important now than ever before – due to the long-lasting high level of unemployment in Croatia (and it is precisely these small and medium sized enterprises, rather than the large ones, who are the generators of new work places) and due to the Croatia’s accession to the European Union where the economic politics places special importance on SME sector. The survival and development of Croatian SME sector on the EU’s single market will depend on their competency to successfully compete and respond to the challenges of the demanding market, new regulations and the fierce competition.

Numerous worldwide research have over a line of years been indicating at the same obstacles for the development of the SME sector in Croatia (CEPOR, 2013):

1. administrative barriers (lasting and expensive procedures for starting up or liquidating a company);
2. inefficiency of the judicial system;
3. long procedures to register ownership;
4. poor focus on entrepreneurial training;
5. underdeveloped informal forms of financing the startup of business undertakings.

The Government of the Republic of Croatia is implementing measures - indirectly through encouraging investments and directly through grants (subsidies) and credit programs – where the aim is promoting the development of the small and medium sized enterprises sector. The Government’s measures implemented in 2012 are a part of the Program for Promoting Small and Medium Sized Entrepreneurship carried out on the basis of annual operative plans for promoting SME sector. Based on the Entrepreneurial Impulse—plan to encourage entrepreneurship and crafts for 2012, the Ministry of Entrepreneurship and Crafts approved grants in the amount of 165.595.421 HRK, which is 16,7% less than in 2011 when the total approved grants amounted to 198.848.066 HRK; and 34,7% less than 2010 when the total approved grants equaled 253.564.217 HRK (CEPOR, 2013).

2013 - 2020 Entrepreneurship Development Strategy is the direct response to the short layout of conditions with a general objective of magnifying the competitiveness of small businesses in Croatia. The realization of the general objective will be supported by measures relating to the five strategic goals (Official Gazette, 2013):

1. Improving economic performance

Enhancement of small businesses’ economic performance in the production and service industry sector through higher investments into research and development, higher degree of innovations, through export increase and further development of business networks and associations.
2. Streamlined approach to financing
Developing different financial possibilities for the small business enterprises and eliminating the financial gap for the small businesses.

3. Promoting entrepreneurship
Providing support to the founding of new enterprises, growth of the number of active enterprises and reinforcement of institutions that support entrepreneurs in a way so as to contribute to a more equal and balanced development of the Croatian regions.

4. Improvement of entrepreneurial skills
Providing support to greater development of small business enterprises through strengthening their management, introducing a large number of highly qualified employees and their activity, and through supporting the lifelong learning process among the SBE employees.

5. Improved business environment
Upgrading the realized progress by cancelling the remaining administrative loads and by facilitating business activities in Croatia.

For the Strategy monitoring and evaluation, benchmarks were given, and indicators were proposed for each strategic goal. Likewise, the organization of implementing and managing the Strategy with a time schedule for monitoring and evaluation were set up

3. LITERATURE REVIEW

3.1. Challenges of Change Management
Even though numerous advice for the success of a single change focus on the linear implementation in several steps, this is rare in real life. On the contrary, managers live with changes that intertwine, overlap and protrude one into another simultaneously, triggered by different forces and motives, led by different managers, consultants and departments; while the barriers and resistance are differentiated by character and significance (Perkov, Genzić, Perkov, 2011).

A change never takes place as the simply prescribed process in several steps. It is rather a matter of a chaotic and complicated affair; the results of which are impacted by an entire string of factors. In this context, leaders must develop a working framework, namely a holistic model valuing the proposed change and taking two parameters into account: a) capability of those who will lead and finalize the changes; b) context where the change is taking place.

The research of Liu and associates (2006), showed that the argumentation for introducing and selecting a specific type of change has mostly not been comprehensible to the target group of people. A survey was conducted on a sample of almost 800 employees from 32 different organizations. As many as 84% of the respondents did not perceive the change initiated by the management as an imperative solution considering the situation and business environment at that point. Rather, they believed that the managerial team had given itself a discretionary right to autonomously choose the change for the organization to react to external circumstances.

Hence, it is not enough for the leaders of changes to accurately identify and interpret the business circumstances demanding for an applicable business change. Apart for this, success also calls for them to objectively assess the organizational restrictions, competences, resources and the level of readiness among people for such an initiative. Unfortunately, many business leaders remain stubborn in clinging to their originally envisaged concept of change, regardless of the circumstances, business momentum, advantages of any modifications to the basic idea, impossibility to copy the solutions of others, people’s ignorance, etc.

A study conducted by Gregersen, Morrison and Black among 130 executive directors from 55 organizations worldwide shows that change management is not so easy. Over 85% of them had labeled change management as a critical leadership capacity (Black, 2001). Deep and radical changes are particularly demanding. In a certain number of such unsuccessful attempts, there was an expressed shortfall of adequate resources, scope and ambition. In others, the executive managers had set the appropriate goals well, but had missed to ensure sustainable support necessary for long-term improvement. It is indicative that the initiators focus only a specific individual aim at the expense of more important and interdependent problems (Pung, 2007).
3.2. Importance of Clusters

The economic importance of clusters, as the business enterprises’ development model is based on the fact that the Republic of Croatia is a part of the global market. The growth and development of entrepreneurship, especially the small enterprises, demands a continuous search for an organizational model which ensures the survival on the market while simultaneously meeting the strategic goal (Gambiroža, Jukić, 2004):

1. increasing added value per unit of product, namely profitability;
2. increasing production which is directed towards export;
3. consequently, retaining and increasing the headcount.

The need for adapting to the global market requires the business enterprises, categorized under the same business activity, to design and set up such an organizational structure that will allow them to reinforce the competitive position on the global market, and thereby allowing for sustainable development as well.

The importance of the cluster model is significant due to as follows (Horvat, Kovačević, 2004):

1. organic growth of SME sector which is insufficient for achieving the demanding growth rates;
2. fast entry into a market and the cooperation with other business enterprises significantly amplifies the velocity thereof;
3. business complexity which is growing by the day, and no small and medium sized business enterprise possesses sufficient experience and expertise;
4. possibility to decrease research and development costs;
5. facilitating access to the global market;
6. innovations rate increase.

The importance of SMEs being organized in clusters is manifested in strengthening and creating competitive competences that will allow them competitiveness equal to that of the large enterprises. Individually, the traditional economic development programs are often criticized on different levels of the system for not being focused on upgrading competitive competences of a business enterprise and/or of the community as a whole, irrespective of this being a region or a state the cluster model enables and encourages the concept of economy competitiveness increase and provides a strategic action framework for realizing the joint vision, mission and goals of all the participants, all the cluster members. Transition countries abandon the role of active planning, execution and supervising since it became evident that the private sector is much more efficient and expert in performing these tasks. States, their governments and institutions must understand and accept the role of setting and creating favorable legal requirements for realizing competitiveness. Government participants’ chief tasks in creating a strategic orientation to clusters are (Horvat, Kovačević, 2004):

1. creating common and administrative terms for improving competitiveness;
2. planning and implementing auxiliary concepts that support cluster development;
3. encouraging national competitiveness so as to encourage quality and innovation, the corresponding technological and market approach;
4. encouraging and streamlining dialogues between the sectors, in the network (top-down), and even more than that, encouraging the clusters themselves (bottom-up).

Development of clusters will facilitate both the state and the region, give a response to the question where to allocate and where to invest the available, namely the already existing resources. The development of the SME sector is largely aided by the state through creating a favorable economic framework namely through: simplifying administrative procedures, encouraging tax policies, simpler registration, organizing counseling and training sessions, offering financial and consulting services. A major role there is played by the institutions as well – mediators – chambers of economy, chambers of crafts, and other associations for entrepreneurship development.

3.3. Competitiveness of Business Enterprises under Conditions of Globalization, and Impact of Clusters

Reorganization and higher flexibility of large business enterprises may be very much contributed through alliances in clusters, associating large with small and medium sized business enterprises, and in this way, through cooperation and affiliations, clusters take on a part of the business activity of the large business enterprise. A mutual inclination of the large and the small businesses towards affiliations for the purpose of increasing competitiveness under the global business conditions is becoming the reason to search for methods of horizontal and vertical affiliations.

Major business enterprises in the Republic of Croatia have gone through restructuring processes, some are still under way, in the market, organizational, or financial aspect in the aim of adjusting to the continuous and sudden changes in the environment.
Encouraging the detachment of specific production phases of large business enterprises, their transformation into separate entrepreneurial projects and stepping into clusters, may be summarized in several points, the most important of these being as follows (Horvat, Kovačević, 2004):

1. decrease of transaction costs;
2. specializing;
3. mutual utilization of flexibility and specialization;
4. utilization of the joint infrastructure and learning.

With respect to the vision, mission and the preset goals, most of the large business enterprises have to, after the completion of organizational re-structuring, be reduced to a reasonable measure. By observing different factors that impact the business enterprises’ competitiveness within a cluster and the entire cluster under the conditions of globalization, we can say that the following carry the highest importance: location, innovation, flexibility, imitation, learning, education and training, human potentials, technology development, availability of capital, and quality. These factors enable that the requirements of customers and all other interested parties are met in a timely, accurate, efficient and continuous fashion for the purpose of the cluster’s successful and sustainable business operations.

3.4. Clusters’ Development Tendency

The approach of independent development, affiliation, entering joint ventures provides more and more space for clusters. Mutual cooperation and affiliations for the purpose of maintaining business stability are being given priority over the last twenty years.

Industrial specifics, tradition and their innovative dynamics are what give special features to regionally affiliated business enterprises in clusters. The degree to which a regional government and its institutions become involved, and even the achieved degree of recognition and acceptance of such a development model of small and medium sized business enterprises have impact on the society’s recognisability (Dostić, 2002).

Clusters affect competitiveness in three ways, namely they (Porter, 1998):

1. increase the company’s productivity based on the geographical region of the cluster;
2. lead to streamlining and movement of innovations;
3. stimulate the creation of new business enterprises within the clusters.

Experiences in cluster model development in some EU countries show that with the aid of clusters it is possible to achieve competitive advantage and internationalization. Competitive advantage may be gained from different sources, including technology, differences in supply or product differentiation. Business enterprises have to concentrate on the said activities and their ability to obtain competitive advantage thus creating a value that exceeds the value of their competitor.

4. GOALS, HYPOTHESIS AND RESEARCH METHODS

The goal of the research is to identify possibilities for improving the competitiveness of small businesses in the manufacture of cocoa, chocolate and candy products (NCA - 10.82) via the cluster business approach.

The hypothesis of the paper is: SME producers of cocoa, chocolate and candy products in the Republic of Croatia are under-utilizing the possibilities of strengthening the competitive advantage, i.e. they do not use the advantages of affiliations and of the joint market approach; they do not use the cluster business model. Scientific methods used in the paper: analysis and synthesis method, comparative, statistic, classification and description methods. Secondary research sources were obtained from relevant and recent technical foreign and national literature, scientific and expert papers.

The research will encompass small business enterprises (hereinafter: SBE) and large business enterprises (hereinafter: LBE) of:

- total Croatian economy;
- section – processing industry (NCA - C) and;
- class – manufacture of cocoa, chocolate and candy products (NCA - 10.82).
Through researching the following indicators will be investigated and established:

- **structure-shares**: of the number of companies, headcount, assets, income, export, profit and loss;
- **dynamics - trend index**: of the number of companies, headcount, assets, income, export, profit and loss;
- **dynamics - trend index**: of assets, income, export, and investments per employee;
- **dynamics - trend index**: of the relation of assets, income, export, and investments per employee between LBEs and SBEs.

### 5. RESEARCH RESULTS

Empirical research was carried out on the basis of the statistical data on the number of companies, headcount, assets, income, export, profit and loss for the whole Croatian economy, section - processing industry (NCA – C) and class - manufacture of cocoa, chocolate and candy products (NCA - 10.82) taken over from the Center for Business Information of the Croatian Chamber of Economy for 2009, 2010, 2011, and 2012. Empirical research and processing the data of the Croatian Chamber of Economy via the methods cited under item - chapter 4, yielded indicators of structure-share and dynamics - trends of the headcount, assets, income, export, profit and loss for SBEs and LBEs.

#### 5.1. Shares and Dynamics – Trend Indices of Number of Companies, Headcount, Assets, Income, Export, Profit and Loss of SBEs and LBEs in Croatian Economy

Established in the first step were the indicators of structure-share and dynamics - trends of the headcount, assets, income, export, profit and loss (hereinafter: examined values) of SBEs and LBEs in the total Croatian economy. The shares of the SBE and LBE examined values in the structure of the Croatian economy are given in Table 1.

**Table 1**: Shares (%) of the number of companies, headcount, assets, income, export, investments, profit and loss of SBEs and LBEs in the Croatian economy

<table>
<thead>
<tr>
<th>Business enterprise size</th>
<th>SBE</th>
<th></th>
<th></th>
<th></th>
<th>LBE</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Year</td>
<td>2009</td>
<td>2010</td>
<td>2011</td>
<td>2012</td>
<td>average</td>
<td>2009</td>
<td>2010</td>
<td>2011</td>
</tr>
<tr>
<td>No. of companies</td>
<td>99,48</td>
<td>99,58</td>
<td>99,61</td>
<td>99,62</td>
<td>99,57</td>
<td>0,52</td>
<td>0,42</td>
<td>0,39</td>
</tr>
<tr>
<td>Headcount</td>
<td>63,90</td>
<td>64,58</td>
<td>65,56</td>
<td>65,23</td>
<td>64,81</td>
<td>36,10</td>
<td>35,42</td>
<td>34,44</td>
</tr>
<tr>
<td>Assets</td>
<td>47,47</td>
<td>48,80</td>
<td>48,18</td>
<td>48,47</td>
<td>48,23</td>
<td>52,53</td>
<td>51,20</td>
<td>51,82</td>
</tr>
<tr>
<td>Income</td>
<td>50,99</td>
<td>49,86</td>
<td>50,25</td>
<td>49,44</td>
<td>50,14</td>
<td>49,01</td>
<td>50,14</td>
<td>49,75</td>
</tr>
<tr>
<td>Export</td>
<td>39,77</td>
<td>40,39</td>
<td>41,99</td>
<td>43,60</td>
<td>41,54</td>
<td>60,23</td>
<td>59,61</td>
<td>58,01</td>
</tr>
<tr>
<td>Investments</td>
<td>37,50</td>
<td>42,79</td>
<td>46,99</td>
<td>45,22</td>
<td>42,47</td>
<td>62,50</td>
<td>57,21</td>
<td>53,01</td>
</tr>
<tr>
<td>Profit</td>
<td>55,86</td>
<td>50,40</td>
<td>53,34</td>
<td>43,94</td>
<td>50,56</td>
<td>44,14</td>
<td>49,60</td>
<td>46,66</td>
</tr>
<tr>
<td>Loss</td>
<td>53,89</td>
<td>70,73</td>
<td>70,61</td>
<td>59,63</td>
<td>65,00</td>
<td>46,11</td>
<td>29,27</td>
<td>29,39</td>
</tr>
</tbody>
</table>

The shares of the number of companies, headcount, assets, export, investments, and loss of SBEs in the structure of the Croatian economy in the cited period showed an upward trend each year in comparison with the base year 2009. The shares of SBEs’ income and profit in the Croatian economy had a downward trend in comparison with the base year 2009. SBE and LBE examined values dynamics - trend indices in the Croatian economy are given in Table 2.
Table 2: Dynamics - trend indices: of the number of companies, headcount, assets, income, export, investments, profit and loss of SBEs and LBEs in the Croatian economy

<table>
<thead>
<tr>
<th>Business enterprise size</th>
<th>SBE</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>LBE</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Year</td>
<td>2009</td>
<td>2010</td>
<td>2011</td>
<td>2012</td>
<td>average</td>
<td>2009</td>
<td>2010</td>
<td>2011</td>
<td>2012</td>
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<td>No. of companies</td>
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<td>1,08</td>
<td>1,07</td>
<td>1,05</td>
<td>1,00</td>
<td>0,86</td>
<td>0,82</td>
<td>0,80</td>
</tr>
<tr>
<td>Headcount</td>
<td>1,00</td>
<td>0,98</td>
<td>0,99</td>
<td>0,96</td>
<td>0,98</td>
<td>1,00</td>
<td>0,95</td>
<td>0,92</td>
<td>0,91</td>
</tr>
<tr>
<td>Assets</td>
<td>1,00</td>
<td>1,01</td>
<td>1,01</td>
<td>1,00</td>
<td>1,00</td>
<td>1,00</td>
<td>0,96</td>
<td>0,98</td>
<td>0,96</td>
</tr>
<tr>
<td>Income</td>
<td>1,00</td>
<td>0,95</td>
<td>1,01</td>
<td>0,97</td>
<td>0,98</td>
<td>1,00</td>
<td>1,00</td>
<td>1,04</td>
<td>1,03</td>
</tr>
<tr>
<td>Export</td>
<td>1,00</td>
<td>1,13</td>
<td>1,26</td>
<td>1,33</td>
<td>1,18</td>
<td>1,00</td>
<td>1,10</td>
<td>1,15</td>
<td>1,14</td>
</tr>
<tr>
<td>Investments</td>
<td>1,00</td>
<td>0,85</td>
<td>0,81</td>
<td>0,80</td>
<td>0,86</td>
<td>1,00</td>
<td>0,68</td>
<td>0,55</td>
<td>0,58</td>
</tr>
<tr>
<td>Profit</td>
<td>1,00</td>
<td>0,97</td>
<td>1,20</td>
<td>1,02</td>
<td>1,05</td>
<td>1,00</td>
<td>1,20</td>
<td>1,32</td>
<td>1,65</td>
</tr>
<tr>
<td>Loss</td>
<td>1,00</td>
<td>2,75</td>
<td>2,36</td>
<td>2,26</td>
<td>2,09</td>
<td>1,00</td>
<td>1,33</td>
<td>1,15</td>
<td>1,79</td>
</tr>
</tbody>
</table>

Trend indices of the number of companies (aver. index 1,05), export (aver. index 1,18), and loss (aver. index 2,09) in SBEs show an increase each year in comparison with the base year 2009. Profit trend index has a variable character – upward or downward – in the given years, in comparison with the base year 2009. 2010 saw a drop (index 0,97), while there was a growth recorded in the other years (average index 1,05). There is almost no change in the SBE assets trend index in comparison with the base year 2009 (average index 1,00). Income trend index has a variable character - upward or downward – in the given years, in comparison with the base year 2009. There was a raise realized in 2011, while in the other years a mild drop was experienced (average index 0,98). Investments trend index (average index 0,86), and headcount trend index (average index 0,98) show a downfall each year in comparison with the base year 2009.

Dynamics - trend indices - of assets, income, export, and investments (hereinafter: part of the earlier examined values) per SBE and LBE employee in the Croatian economy are given in Table 3.

Table 3: Trend indices: of assets, income, export, and investments per SBE and LBE employee in the Croatian economy

<table>
<thead>
<tr>
<th>Business enterprise size</th>
<th>SBE</th>
<th></th>
<th></th>
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<th></th>
<th>LBE</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Year</td>
<td>2009</td>
<td>2010</td>
<td>2011</td>
<td>2012</td>
<td>average</td>
<td>2009</td>
<td>2010</td>
<td>2011</td>
<td>2012</td>
</tr>
<tr>
<td>Assets</td>
<td>1,00</td>
<td>1,03</td>
<td>1,01</td>
<td>1,03</td>
<td>1,02</td>
<td>1,00</td>
<td>1,01</td>
<td>1,06</td>
<td>1,05</td>
</tr>
<tr>
<td>Income</td>
<td>1,00</td>
<td>0,97</td>
<td>1,01</td>
<td>1,00</td>
<td>1,00</td>
<td>1,00</td>
<td>1,05</td>
<td>1,12</td>
<td>1,13</td>
</tr>
<tr>
<td>Export</td>
<td>1,00</td>
<td>1,15</td>
<td>1,27</td>
<td>1,38</td>
<td>1,20</td>
<td>1,00</td>
<td>1,15</td>
<td>1,25</td>
<td>1,25</td>
</tr>
<tr>
<td>Investments</td>
<td>1,00</td>
<td>0,86</td>
<td>0,81</td>
<td>0,83</td>
<td>0,88</td>
<td>1,00</td>
<td>0,71</td>
<td>0,59</td>
<td>0,64</td>
</tr>
</tbody>
</table>

Assets and export trend index per employee shows the index increase each year in comparison with the base year 2009 in the total Croatian economy. Income trend index per employee in the Croatian economy shows a growth in two years (except 2010 for SBE) compared to the base year 2009. Investments trend index per employee demonstrates the index drop each year in SBEs and LBEs in the Croatian economy compared to the base year 2009.

Dynamics – trend indices of the relation between the SBE and LBE part of the examined values per employee in the Croatian economy are given in Table 4. The presented data show the amounts (in HRK) realized by LBEs per employee compared to 1 HRK realized by SBEs per employee.
Table 4: Index of the relation between SBEs and LBEs in the Croatian economy: assets, income, export, and investments per employee.

<table>
<thead>
<tr>
<th>Business enterprise size</th>
<th>SBE</th>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2009</td>
<td>2010</td>
<td>2011</td>
<td>2012</td>
<td>average</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assets</td>
<td>1,96</td>
<td>1,91</td>
<td>2,05</td>
<td>1,99</td>
<td>1,98</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income</td>
<td>1,70</td>
<td>1,83</td>
<td>1,88</td>
<td>1,92</td>
<td>1,83</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Export</td>
<td>2,68</td>
<td>2,69</td>
<td>2,63</td>
<td>2,43</td>
<td>2,59</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investments</td>
<td>2,95</td>
<td>2,44</td>
<td>2,15</td>
<td>2,27</td>
<td>2,49</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The determined dynamics of the relation between assets and income per employee between the Croatian economy LBEs and SBEs shows the value increase in LBE compared to 1 HRK in SBE. The dynamics of the relation between export and investments per employee for the same business enterprises shows the value decrease in LBE compared to 1 HRK in SBE. The obtained indicators in the Croatian economy were compared with the indicators of the class – manufacture of cocoa, chocolate and candy products; the position of the class in relation to the Croatian economy was determined under item-chapter 5.4.

5.2. Shares and Dynamics - Trend Indices of Number of Companies, Headcount, Assets, Income, Export, Profit and Loss of Small and Large Business Enterprises in Processing Industry (NCA - C) of Croatian Economy

Established in the second step were the indicators of structure-share and dynamics - trends of the headcount, assets, income, export, profit and loss (hereinafter: examined values) of SBEs and LBEs in the processing industry (NCA – C) of the Croatian economy. The shares of the SBE and LBE examined values in the processing industry structure (NCA – C) of the Croatian economy are given in Table 5.

Table 5: Shares (%) of the number of companies, headcount, assets, income, export, investments, profit and loss of SBEs and LBEs in the processing industry (NCA - C) of the Croatian economy

<table>
<thead>
<tr>
<th>Business enterprise size</th>
<th>SBE</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of companies</td>
<td>98,70</td>
<td>98,90</td>
<td>98,94</td>
<td>98,91</td>
<td>98,87</td>
<td>1,30</td>
<td>1,10</td>
<td>1,06</td>
<td>1,09</td>
</tr>
<tr>
<td>Headcount</td>
<td>59,82</td>
<td>61,18</td>
<td>63,14</td>
<td>62,03</td>
<td>61,53</td>
<td>40,18</td>
<td>38,82</td>
<td>36,86</td>
<td>37,97</td>
</tr>
<tr>
<td>Assets</td>
<td>43,08</td>
<td>46,24</td>
<td>45,72</td>
<td>43,55</td>
<td>44,66</td>
<td>56,92</td>
<td>53,76</td>
<td>54,28</td>
<td>56,45</td>
</tr>
<tr>
<td>Income</td>
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<td>39,67</td>
<td>40,46</td>
<td>38,07</td>
<td>39,61</td>
<td>59,67</td>
<td>60,33</td>
<td>59,54</td>
<td>61,93</td>
</tr>
<tr>
<td>Export</td>
<td>30,59</td>
<td>29,70</td>
<td>44,28</td>
<td>32,66</td>
<td>30,95</td>
<td>69,41</td>
<td>70,30</td>
<td>100,00</td>
<td>67,34</td>
</tr>
<tr>
<td>Investments</td>
<td>29,55</td>
<td>33,94</td>
<td>42,75</td>
<td>41,08</td>
<td>35,94</td>
<td>70,45</td>
<td>66,06</td>
<td>57,25</td>
<td>58,92</td>
</tr>
<tr>
<td>Profit</td>
<td>43,67</td>
<td>35,31</td>
<td>43,81</td>
<td>20,91</td>
<td>34,05</td>
<td>56,33</td>
<td>64,69</td>
<td>56,19</td>
<td>79,09</td>
</tr>
<tr>
<td>Loss</td>
<td>41,35</td>
<td>59,09</td>
<td>50,51</td>
<td>53,62</td>
<td>52,55</td>
<td>58,65</td>
<td>40,91</td>
<td>49,49</td>
<td>46,38</td>
</tr>
</tbody>
</table>

The shares of the number of companies, headcount, assets, investments, and loss of SBEs in the processing industry (NCA – C) of the Croatian economy had an upward trend each year in comparison with the base year 2009. SBE export share also demonstrates a growth during a period of two years while recording a drop in 2010 compared to the base year 2009. SBE income and profit shares in the processing industry (NCA - C) of the Croatian economy declined in two years when compared to the base year 2009, but 2011 saw their elevation.
Dynamics - trend indices of the SBE and LBE examined values in the processing industry (NCA - C) of the Croatian economy are given in Table 6.

**Table 6**: Trend indices: of the number of companies, headcount, assets, income, export, investments, profit and loss of SBEs and LBEs in the processing industry (NCA - C) of the Croatian economy

<table>
<thead>
<tr>
<th>Business enterprise size</th>
<th>SBE</th>
<th>LBE</th>
</tr>
</thead>
<tbody>
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<td>Year</td>
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<tr>
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<td>1,06</td>
<td>0,93</td>
</tr>
<tr>
<td>No. of companies</td>
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<td></td>
</tr>
<tr>
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<td>1,00</td>
</tr>
<tr>
<td>2010</td>
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</tr>
<tr>
<td>average</td>
<td>1,01</td>
<td>0,91</td>
</tr>
<tr>
<td>Headcount</td>
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<td></td>
</tr>
<tr>
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<td>1,00</td>
<td>1,00</td>
</tr>
<tr>
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<td>average</td>
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<td>0,93</td>
</tr>
<tr>
<td>Assets</td>
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<td></td>
</tr>
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<td>1,00</td>
</tr>
<tr>
<td>2010</td>
<td>1,02</td>
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</tr>
<tr>
<td>average</td>
<td>1,05</td>
<td>0,93</td>
</tr>
<tr>
<td>Income</td>
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<td></td>
</tr>
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</tr>
<tr>
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<td>1,17</td>
</tr>
<tr>
<td>2011</td>
<td>1,24</td>
<td>1,23</td>
</tr>
<tr>
<td>2012</td>
<td>1,32</td>
<td>1,20</td>
</tr>
<tr>
<td>average</td>
<td>1,17</td>
<td>1,15</td>
</tr>
<tr>
<td>Export</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td>1,00</td>
<td>1,00</td>
</tr>
<tr>
<td>2010</td>
<td>0,86</td>
<td>0,71</td>
</tr>
<tr>
<td>2011</td>
<td>0,95</td>
<td>0,53</td>
</tr>
<tr>
<td>2012</td>
<td>0,92</td>
<td>0,56</td>
</tr>
<tr>
<td>average</td>
<td>0,93</td>
<td>0,70</td>
</tr>
<tr>
<td>Investments</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td>1,00</td>
<td>1,00</td>
</tr>
<tr>
<td>2010</td>
<td>1,03</td>
<td>1,00</td>
</tr>
<tr>
<td>2011</td>
<td>2,16</td>
<td>1,46</td>
</tr>
<tr>
<td>2012</td>
<td>1,18</td>
<td>2,14</td>
</tr>
<tr>
<td>average</td>
<td>1,34</td>
<td>3,45</td>
</tr>
<tr>
<td>Profit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td>1,00</td>
<td>1,00</td>
</tr>
<tr>
<td>2010</td>
<td>2,69</td>
<td>1,31</td>
</tr>
<tr>
<td>2011</td>
<td>1,49</td>
<td>1,03</td>
</tr>
<tr>
<td>2012</td>
<td>1,66</td>
<td>1,01</td>
</tr>
<tr>
<td>average</td>
<td>1,71</td>
<td>1,09</td>
</tr>
<tr>
<td>Loss</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td>1,00</td>
<td>1,00</td>
</tr>
<tr>
<td>2010</td>
<td>2,69</td>
<td>1,31</td>
</tr>
<tr>
<td>2011</td>
<td>1,49</td>
<td>1,03</td>
</tr>
<tr>
<td>2012</td>
<td>1,66</td>
<td>1,01</td>
</tr>
<tr>
<td>average</td>
<td>1,71</td>
<td>1,09</td>
</tr>
</tbody>
</table>

Trend indices of the number of companies (average index 1,06), income (average index 1,05), export (average index 1,17), profit (average index 1,71), and loss (average index 2,09) in SBEs compared to the base year 2009. There is almost no change compared to the base year 2009 in the trend indices of headcount (average index 1,00), and assets (average index 1,01). In the last year of the examined period, in both values, there was an index decline realized. SBE investments trend index in the processing industry (NCA - C) of the Croatian economy was declining each year in comparison with the base year 2009 (average index 0,93). Dynamics - trend index of assets, income, export, and investments (hereinafter: part of the earlier examined values) per SBE and LBE employee in the processing industry (NCA - C) of the Croatian economy are given in Table 7.

**Table 7**: Trend indices of assets, income, export, and investments per SBE and LBE employee in the processing industry (NCA - C) of the Croatian economy

<table>
<thead>
<tr>
<th>Business enterprise size</th>
<th>SBE</th>
<th>LBE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td>1,00</td>
<td>1,00</td>
</tr>
<tr>
<td>2010</td>
<td>1,04</td>
<td>0,97</td>
</tr>
<tr>
<td>2011</td>
<td>1,02</td>
<td>1,05</td>
</tr>
<tr>
<td>2012</td>
<td>0,96</td>
<td>1,05</td>
</tr>
<tr>
<td>average</td>
<td>1,00</td>
<td>1,03</td>
</tr>
<tr>
<td>Assets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td>1,00</td>
<td>1,00</td>
</tr>
<tr>
<td>2010</td>
<td>1,02</td>
<td>1,11</td>
</tr>
<tr>
<td>2011</td>
<td>1,10</td>
<td>1,26</td>
</tr>
<tr>
<td>2012</td>
<td>0,96</td>
<td>1,32</td>
</tr>
<tr>
<td>average</td>
<td>1,00</td>
<td>1,17</td>
</tr>
<tr>
<td>Income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td>1,00</td>
<td>1,00</td>
</tr>
<tr>
<td>2010</td>
<td>1,12</td>
<td>1,24</td>
</tr>
<tr>
<td>2011</td>
<td>1,20</td>
<td>1,38</td>
</tr>
<tr>
<td>2012</td>
<td>1,35</td>
<td>1,35</td>
</tr>
<tr>
<td>average</td>
<td>1,17</td>
<td>1,23</td>
</tr>
<tr>
<td>Export</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td>1,00</td>
<td>1,00</td>
</tr>
<tr>
<td>2010</td>
<td>0,86</td>
<td>0,74</td>
</tr>
<tr>
<td>2011</td>
<td>0,92</td>
<td>0,50</td>
</tr>
<tr>
<td>2012</td>
<td>0,95</td>
<td>0,60</td>
</tr>
<tr>
<td>average</td>
<td>0,93</td>
<td>0,63</td>
</tr>
<tr>
<td>Investments</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td>1,00</td>
<td>1,00</td>
</tr>
<tr>
<td>2010</td>
<td>0,86</td>
<td>0,74</td>
</tr>
<tr>
<td>2011</td>
<td>0,92</td>
<td>0,50</td>
</tr>
<tr>
<td>2012</td>
<td>0,95</td>
<td>0,60</td>
</tr>
<tr>
<td>average</td>
<td>0,93</td>
<td>0,63</td>
</tr>
</tbody>
</table>

SBE income and export trend indices per employee show an increase each year in comparison with the base year 2009 in the processing industry (NCA – C) of the Croatian economy. SBE assets trend index per employee shows an increase in two years and a downfall in 2012 with an index of 0,96 compared to the base year 2009. Investments trend index per employee demonstrates a drop each year (average 0,93) in SBEs in the processing industry (NCA - C) of the Croatian economy compared to the base year 2009.

Dynamics – trend index of the relation between LBE and SBE part of the earlier examined values per employee in the processing industry (NCA - C) of the Croatian economy is given in Table 8. The presented data show the amounts (in HRK) realized by LBEs per employee compared to 1 HRK realized by SBEs per employee.
Table 8: Index of the relation between SBEs and LBEs in the processing industry (NCA -C) of the Croatian economy: of assets, income, export, and investments per employee

<table>
<thead>
<tr>
<th>Business enterprise size</th>
<th>SBE</th>
<th>LBE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year</td>
<td>2009</td>
<td>2010</td>
</tr>
<tr>
<td>Assets</td>
<td>1,97</td>
<td>1,83</td>
</tr>
<tr>
<td>Income</td>
<td>2,20</td>
<td>2,40</td>
</tr>
<tr>
<td>Export</td>
<td>3,38</td>
<td>3,73</td>
</tr>
<tr>
<td>Investments</td>
<td>3,55</td>
<td>3,07</td>
</tr>
</tbody>
</table>

The established trend indices of the relation of assets (average index 1.98), income (average index 2.44), and export (average index 3.57) in LBE/SBE per employee show a growing gap favoring LBE over SBE. LBE/SBE assets relation index is the only one recording a decline of the difference in 2010 when compared to 2009. LBE/SBE investments relation trend index per employee shows a lessening gap. 1 HRK of investments per employee in SBE equals an average 2.85 HRK per employee in LBE. The obtained indicators in the processing industry (NCA – C) of the Croatian economy were compared with the indicators of the class - manufacture of cocoa, chocolate and candy products; the position of the class in relation to the Croatian economy was determined under item-chapter 5.4.

5.3. Shares and Dynamics - Trend Indices of Number of Companies, Headcount, Assets, Income, Export, Profit and Loss of Small and Large Business Enterprises in Manufacture of Cocoa, Chocolate and Candy Products (NCA - 10.82)

Established in the third step were the indicators of structure-share and dynamics - trends of the headcount, assets, income, export, profit and loss (hereinafter: examined values) of SBEs and LBEs in the manufacture of cocoa, chocolate and candy products of the Croatian economy. The trend of the share of SBE and LBE examined values in the structure of the examined activity is given in Table 9.

Table 9: Shares (%): of the number of companies, headcount, assets, income, export, investments, profit and loss of SBEs and LBEs in the manufacture of cocoa, chocolate and candy products(NCA – 10.82) of the Croatian economy

<table>
<thead>
<tr>
<th>Business enterprise size</th>
<th>SBE</th>
<th>LBE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year</td>
<td>2009</td>
<td>2010</td>
</tr>
<tr>
<td>No. of companies</td>
<td>78,57</td>
<td>76,92</td>
</tr>
<tr>
<td>Headcount</td>
<td>6,94</td>
<td>5,11</td>
</tr>
<tr>
<td>Assets</td>
<td>2,59</td>
<td>10,43</td>
</tr>
<tr>
<td>Income</td>
<td>2,04</td>
<td>1,50</td>
</tr>
<tr>
<td>Export</td>
<td>0,001</td>
<td>0,017</td>
</tr>
<tr>
<td>Investments</td>
<td>3,23</td>
<td>47,88</td>
</tr>
<tr>
<td>Profit</td>
<td>0,08</td>
<td>1,13</td>
</tr>
<tr>
<td>Loss</td>
<td>100,00</td>
<td>52,35</td>
</tr>
</tbody>
</table>

SBE investment and profit shares (NCA – 10.82) of the Croatian economy demonstrated an increasing trend each year compared to the base year 2009. SBE assets share in the structure of business enterprises in the manufacture of cocoa, chocolate and candy products (NCA – 10.82) of the Croatian economy grew during two years and declined in 2012 compared to the base year 2009. The headcount and income indicate smaller shares in two years when compared to the base year 2009 and an increase in 2011. The number of companies demonstrates a trend of a smaller share in all the years of the examined period in comparison with the base year 2009. SBE loss share in the examined period ranged from
100% in 2009 and 2011, to the least share expressed in 2012, namely 17.54%. SBE export share in the examined period was at the level of: 0.001% in 2009, 0.017% in 2010, and 14.11% in 2011, while in 2012 there was no export at all!

Dynamics –SBE and LBE examined values trend index in the examined activity are given in Table 10.

**Table 10:** Dynamics - trend indices: of the number of companies, headcount, assets, income, export, investments, profit and loss of SBEs and LBEs in the manufacture of cocoa, chocolate and candy products (NCA – 10.82) of the Croatian economy

<table>
<thead>
<tr>
<th>Business enterprise size</th>
<th>SBE</th>
<th>LBE</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of companies</td>
<td>1,00</td>
<td>0,91</td>
</tr>
<tr>
<td>Headcount</td>
<td>1,00</td>
<td>0,71</td>
</tr>
<tr>
<td>Assets</td>
<td>1,00</td>
<td>4,38</td>
</tr>
<tr>
<td>Income</td>
<td>1,00</td>
<td>0,72</td>
</tr>
<tr>
<td>Export</td>
<td>1,00</td>
<td>23,18</td>
</tr>
<tr>
<td>Investments</td>
<td>1,00</td>
<td>18,37</td>
</tr>
<tr>
<td>Profit</td>
<td>1,00</td>
<td>9,44</td>
</tr>
<tr>
<td>Loss</td>
<td>1,00</td>
<td>74,85</td>
</tr>
</tbody>
</table>

Export trend index (average index 4.758,44), SBEs in the manufacture of cocoa, chocolate and candy products (NCA - 10.82) of the Croatian economy, recorded leaps of increase – due to the small share in the base year and the total fiasco in 2012 - export was not realized! Investments, profit and loss trend indices had a growth in all three years, when compared with the base year 2009, characterized by leaps and unbalance. Assets trend index (average index 2,39) indicates the increase of index in two years when compared to the base year 2009 and a drop in 2012 (index 0,60). Headcount and income trend indices demonstrate a significant decline in the two years of the examined period with the exception of a substantial increment in 2011 when compared to the base year. The number of companies’ trend index (average index 0,80) shows a downward trend in all three years in comparison with the base year 2009.

Dynamics - trend index of assets, income, export, and investments (hereinafter: part of the examined values) per SBE and LBE employee in the examined activity are given in Table 11.

**Table 11:** Dynamics - trend indices: of assets, income, export, and investments per SBE and LBE employee in the manufacture of cocoa, chocolate and candy products (NCA – 10.82) of the Croatian economy

<table>
<thead>
<tr>
<th>Business enterprise size</th>
<th>SBE</th>
<th>LBE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assets</td>
<td>1,00</td>
<td>6,14</td>
</tr>
<tr>
<td>Income</td>
<td>1,00</td>
<td>1,01</td>
</tr>
<tr>
<td>Export</td>
<td>1,00</td>
<td>32,49</td>
</tr>
<tr>
<td>Investments</td>
<td>1,00</td>
<td>25,75</td>
</tr>
</tbody>
</table>

Assets trend index (average index 3,13) and income trend index (average index 1,72) in SBEs per employee show the index increase each year in comparison with the base year 2009. Investments trend index (average index 13,87) in SBE per employee shows a strong growth in two years and a noteworthy downfall in 2011 in comparison with the base year 2009. Export trend index (average index 2.233,61) per employee showed an extremely strong growth in 2010 and 2011 while in 2012 there was no export at all!
Dynamics - trend index of the relation between SBE and LBE of the part of the examined values per employee in the examined activity are given in Table 12. The presented data show the amounts (in HRK) realized by LBEs per employee compared to 1 HRK realized by SBEs per employee.

**Table 12:** Indices of the relation between SBEs and LBEs in the manufacture of cocoa, chocolate and candy products (NCA – 10.82) of the Croatian economy: of assets, income, export, and investments per employee

<table>
<thead>
<tr>
<th>Business enterprise size</th>
<th>SBE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year</td>
<td>2009</td>
</tr>
<tr>
<td>Assets</td>
<td>2,80</td>
</tr>
<tr>
<td>Income</td>
<td>3,58</td>
</tr>
<tr>
<td>Export</td>
<td>9,948,71</td>
</tr>
<tr>
<td>Investments</td>
<td>2,24</td>
</tr>
</tbody>
</table>

The established trend index of the relation of export (SBEs’ 1 HRK = LBEs’ average 4,66 HRK) between LBEs and SBEs per employee in the examined period shows extreme trends of the gap decrease and increase. In export there was a decline of the gap in favor of SBE in 2010 and 2011 (index 1,23). In 2012 there was no export at all!

Investments relation trend index between LBEs and SBEs shows the variability of the relation in each of the examined years. In 2009: SBEs’1 HRK = LBEs’2,24HRK; in 2010: SBEs’ 1 HRK = LBEs’0,06 HRK; in 2011: SBEs’1 HRK = LBEs’2,68 HRK, and in 2012: SBEs’1 HRK = LBEs’0,07 HRK.

SBE and LBE assets and income relation trend indices the manufacture of cocoa, chocolate and candy products (NCA – 10.82) of the Croatian economy per employee show the gaps’ downward trend every year when compared to the base year 2009.

The obtained indicators of the class - manufacture of cocoa, chocolate and candy products under the subsequent item-chapter 5.4 were compared with the indicators of the processing industry (NCA - C) and with the indicators of the Croatian economy; the position of the examined class was determined in relation to the processing industry and to the Croatian economy.

**5.4. SBEs’ Position of Business Activity - Manufacture of Cocoa, Chocolate and Candy Products in Relation to Processing Industry and Croatian Economy**

SBEs’ position of the class – business activity of the manufacture of cocoa, chocolate and candy products (hereinafter: class) in relation to the processing industry and the Croatian economy was established through the indicators of share in structure and through dynamics - trend index of the number of companies, headcount, assets, income, export, investments, profit and loss; dynamics - trend index of assets, income, export, and investments per employee, and per the dynamics - trend index of the relation of assets, income, export, and investments per employee between LBE and SBE.

SBEs’ position of the class based on the share in the structure of the number of companies, headcount, assets, income, export, investments, profit and loss in relation to the processing industry SBEs and the SBEs of the total realistic Croatian economy is the following:

1. The share of the SBE number of companies in the structure of the class has a reverse – negative trend and thereby a worse position was realized compared to the structures of the processing industry and of the Croatian economy that realized an upward trend in the entire period in comparison with the base year.

2. SBE headcount share in the structure of the class is variable; drop, growth and drop by 5,61% – in 2012; thereby a worse position was demonstrated compared to the structures of the processing industry and of the Croatian economy that realized an upward trend in the entire period in comparison with the base year.

3. SBE assets share in the structure of the class has a reverse - negative trend and thereby a worse position compared to the structures of the processing industry and of the Croatian economy with a high growth of the share in 2010 and 2011. An expressed growth was shown in 2010 and 2011, and a strong decline in 2012.
4. SBE income share in the structure of the class is extremely variable in the examined period with a major drop at the end of the period, thereby a worse position was realized compared to the structures of the processing industry and of the Croatian economy.

5. SBE income share in the structure of the class is exceptionally favorable – a strong growth in 2010 and 2011, noting that in 2012 there was no export at all, so instead of a more favorable position rather a worse one was realized when compared to the structures of the processing industry and of the Croatian economy.

6. SBE investments share in the structure of the class is exceptionally favorable – stronger, whereby a more favorable position was realized in relation to the structures of the processing industry and of the Croatian economy.

7. SBE profit share in the structure of the class is exceptionally favorable – stronger, whereby a more favorable position was realized in relation to the structures of the processing industry and of the Croatian economy.

8. SBE loss share in the structure of the class is exceptionally turbulent, in two examined years a share of as much as 100% was realized, whereby a more unfavorable position was realized in relation to the structures of the processing industry and of the Croatian economy.

Based on the aforementioned indicators, SBEs’ position of the class in the structure of 6 examined values is worse at the end of the examined period, while improvement was realized in two examined values, namely investments and profit.

SBEs’ position of the class based on the dynamics - trend index of the number of companies, headcount, assets, income, export, investments, profit and loss in relation to the processing industry SBEs and the SBEs of the overall realistic Croatian economy is the following:

1. SBE number of companies trend index of the class has a reverse - negative trend, and thereby a worse position compared to the trends in the processing industry and the Croatian economy.

2. SBE headcount trend index of the class is worse than that of the processing industry and of the Croatian economy, and thereby it has a worse position compared to the headcount trends in the processing industry and the Croatian economy.

3. SBE assets trend index of the class is very diverse, from a powerful growth to a headlong fall in 2012; thereby it has a worse position in the last year of the examined period compared to the structures of the processing industry and of the Croatian economy where the assets trend indices are stagnant or on a mild decline.

4. SBE income trend index of the class demonstrates a significant instability of the examined period with a powerful drop at the end of the period with an index of 0.34, and thereby showing a worse position compared to the processing industry structures with an upward trend and to the stagnant Croatian economy.

5. SBE export trend index of the class shows a strong growth in 2010 and an even stronger one in 2011. In 2012, there was no export at all! Instead of a more favorable position, due to the realized trends in the first two years of the examined period, rather a worse position was realized when compared to the structures of the processing industry and of the Croatian economy where there was a growing trend.

6. SBE investments trend index of the class shows a powerful growth with an average index of 6.27 in all the examined years with an extreme leap of growth in 2010; thereby a more favorable position was realized in relation to the structures of the processing industry and of the Croatian economy that showed a downward movement of the index in the examined period.

7. SBE profit trend index of the class, in the examined period, is higher that the profit index of the processing industry and of the Croatian economy, whereby a more favorable position was realized in relation to the processing industry and the Croatian economy.

8. SBE loss trend index of the class in the examined period was exceptionally high with an average index being 52.84, whereby a more unfavorable position was realized in relation to the processing industry and the Croatian economy, since the average loss index is 1.71 in the processing industry, and 2.09 in the Croatian economy.

Based on the aforementioned indicators, SBEs’ position of the class in the dynamics - trend index of 6 examined values is worse at the end of the examined period, while improvement was realized in two examined values, namely investments and profit. SBEs’ position of the class based on the dynamics - trend index of assets, income, export, and investments per employee in relation to the processing industry SBEs and the SBEs of the overall realistic Croatian economy is the following:
1. Assets trend index per SBE employee of the class shows a strong growth with an average index of 3.13. Extremely high leaps of growth were realized in 2010 with an index of 6.14. In relation to the processing industry SBEs that were stagnant, and the Croatian economy where there was a rise of the average index 1.02, a more favorable position was realized in the examined period.

2. Income trend index per SBE employee of the class demonstrates a growth with an average index of 1.72 while the processing industry SBEs realized a lower growth with an average index of 1.05, and the Croatian economy SBEs were stagnant. Based on as established, SBEs of the class realized a more favorable position in relation to the SBEs of the processing industry and of the Croatian economy.

3. Export trend index per SBE employee of the class shows a strong growth in 2010 and an even stronger one in 2011. In 2012, there was no export at all! Instead of a more favorable position, due to the realized trends in the first two years of the examined period, rather a worse position was realized when compared to the structures of the processing industry (average index 1.17) and of the Croatian economy (average index 1.20) where there was a growing trend in all the examined years.

4. Investments trend index per SBE employee of the class shows a potent growth with average index of 13.87 and an extreme drop in 2011, whereby a more favorable position was realized in comparison to the structures of the processing industry (average index 0.93) and of the Croatian economy (average index 0.88) where there was a downward movement of the index in the examined period.

Based on the aforementioned indicators, SBEs’ position of the class in the dynamics - trend index of assets, income, export, and investments per employee in three examined values is more favorable at the end of the examined period, while it is worse in one of the examined values, namely export. Investments trend had a positive effect on both assets and income trends. SBEs’ position of the class based on the dynamics - trend index of the relation of assets, income, export, and investments per employee between LBEs and SBEs in relation to the processing industry SBEs and the SBEs of the overall realistic Croatian economy is the following:

1. Assets relation trend index per LBE and SBE employee of the class had a strong decline of the gap with an average index of 0.93. Assets relation per LBE and SBE of the processing industry recorded a larger gap with the average index of 1.98 in the examined period, while the same relation in the Croatian economy was stagnating. Based on the established indicators, SBEs of the class realized a more favorable position was realized in relation to the processing industry SBEs and the SBEs of the Croatian economy.

2. Income relation trend index per LBE and SBE employee of the class showed a decrease of the gap from the initial index 3.58 to the final index of 1.82 in the examined period. In the same period, the processing industry SBEs realized an increase of the gap with an average index 2.44, and the Croatian economy SBEs showed the same trend with an average index of 1.83. Based on as established, SBEs of the class realized a more favorable position in relation to the SBEs of the processing industry and of the Croatian economy.

3. Export relation trend index per LBE and SBE employee of the class showed a strong level of variation and instability. In the first two years of the examined period, there was a strong decrease of the gap recorded from several tens to several thousands of times so that the index in 2011 equaled 1.23 while in 2012 there was a collapse recorded - no export was realized. In the same period, processing industry SBEs had a trend of gap increase in favor of LBEs with an average index of 3.57, and the Croatian economy SBEs showed a small gap decrease with an average index of 2.59. Based on as established, SBEs of the class realized a more favorable position in the beginning of the examined period, however in the last examined years they experienced a collapse since export was not realized, in relation to the SBEs of the processing industry and of the Croatian economy.

4. Investments relation trend index per LBE and SBE employee of the class showed a reverse gap in favor of SBEs in 2010 with an index of 0.06, and in 2012 with an index of 0.07, while in 2011 a slightly larger gap was realized (index 2.68) when compared to the base year. In the processing industry, SBEs showed a gap decrease with an average index of 2.85, and SBEs of the Croatian economy showed a gap decrease with an average index of 2.49 in the examined period between 2009 and 2012. Based on as established, SBEs of the class realized a more favorable position in relation to the SBEs of the processing industry and of the Croatian economy.

Based on the aforementioned indicators, SBEs’ position of the class in the dynamics - trend index of the relation of assets, income, export, and investments per employee between LBEs and SBEs in three examined values is more favorable at the end of the examined period while it is worse in one of the examined values, namely export. Investments trend had a positive effect on assets and income trends as well.
6. CONCLUSION

The indicators of the share of structure and dynamics of number of companies, headcount, assets, income, export, investments, profit and loss, and the dynamics of trends of assets, income, export, and investments per SBE employee, and the dynamic of the relation per employee between LBEs and SBEs in the manufacture of cocoa, chocolate and candy products (NCA - 10.82) of the Croatian economy show the following:

1. At the end of the examined period, SBEs’ position of the class in the structure and dynamics-index of number of companies, headcount, assets, income, export, investments, profit and loss is worse in six examined values while improvement was realized in two examined values, namely investments and profit.

2. At the end of the examined period, SBEs’ position of the class in the dynamics - trend index of assets, income, export, and investments per employee and in the dynamics - trend index of the relation of assets, income, export, and investments per employee between LBEs and SBEs is more favorable in three examined values while it is worse in one of the examined values, namely export. Investments trend had a positive effect on assets and income trends as well.

3. Increase of investments in the examined period is the ramification of the state politics of stimulating SBE development and investing grants.

Based on the determined indicators of the share in the structure, dynamics and especially of the trends per employee and the relation of LBE/SBE per employee, it is evident that investments realize the multiple growth trend while the trends in the dynamics of assets and income do not have such a strong increase, but rather a substantially modest one. A concerning information is that in 2012 there was no export at all! A major problem as well for the realization of a better SBEs’ position of the class is found in the realization of higher losses in comparison with the first year of the examined period.

The economy of the examined class – business activity in comparison with the Croatian economy and the processing industry shows the cited opposite trends which indicates a less stable business operation of the activity when compared to the processing industry and the Croatian economy which would be avoided and/or diminished through affiliating namely through a cluster approach to business.

It has been established beyond doubt that the examined business enterprises do not utilize the possibilities of strengthening the competitive advantage, i.e. they do not use the advantages of affiliations and of the joint market approach, namely they do not use the cluster business model which confirms the preset hypothesis.

LITERATURE

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ORGANIC FOOD PREFERENCES: SIGNIFICANCE OF SOCIO-DEMOGRAPHIC AND ATTITUDINAL MARKET SEGMENTATION VARIABLES
RUZICA KOVAC P. ZNIDERSIC
INES DJOKIC
NENAD DJOKIC

ABSTRACT
Although supply is still not meeting Serbian organic food market demand, increasing consumers’ organic food acceptance will be crucial for significant future market development. As previous researches have shown, important role for future organic food consumption will belong to young and more educated people. However, for creating, implementing and controlling adequate marketing mix in order to target this market segment, additional market segmentation variable research is necessary. In this paper, organic food preferences of young and educated respondents were considered as basis for further segmentation (the research was conducted in Autonomous province of Vojvodina in February 2014, n=140). The choice of preferences can be understood in context of insufficient organic food supply at domestic market as well as future increasing of respondents’ income as basis for transforming preferences into food consumption. Respondents were segmented into consumers with low organic food preferences (prefer to consume it once in several weeks or less frequent), consumers with medium organic food preferences (prefer to consume it once a week) and consumers with high organic food preferences (prefer to consume it several times a week, every day or several times a day). Furthermore, consumers’ segments were compared regarding different socio-demographic and attitudinal market segmentation variables. Out of socio-demographic variables, segments were statistically significantly different only regarding gender – the percent of women was increasing in segments more preferring organic food. Consumers’ attitudes reflecting their natural product interest were also significant for organic food preferences – consumers’ segment preferring organic food highly was statistically significantly different in comparison to other segments in terms of respondents rating these items higher. Besides, recommendations at tactical marketing level were given in the paper.

KEYWORDS: Organic food preferences, Organic food market segmentation variables, Young and educated consumers

1. INTRODUCTION
Although supply is still not meeting Serbian organic food market demand (März et al., 2012), there are contradictory prognosis regarding future potential of acceptance of organic food by domestic consumers, whereas some authors doubt that potential being high (Maslac, 2009; März et al., 2012), while others believe it exists (Renko et al., 2011). Nevertheless, domestic organic food consumers are crucial for motivating domestic farmers to start organic food production (Kočić Vugdelija et al., 2011) as well as for continuing activities of foreign producers and importers of organic food to Serbia (März et al., 2012). Some previous researches, although with partly contradictory results, have shown that important role for future organic food consumption will belong to young (Vlahović et al., 2010; Vlahović et al., 2011) and more educated people (Renko et al., 2011; Vlahović et al., 2011). However, for creating, implementing and controlling adequate marketing mix in order to target this market segment, additional market segmentation variable research could be useful. This is in line with Kotler (2007) who identifies steps within marketing management process: marketing research, strategic marketing (including market segmentation, targeting and positioning) and tactical marketing (related to creating marketing mix, its implementation and control).

Considering relevant literature, there can be identified the importance of both, socio-demographic, for example: gender (O’Donovan & McCarthy, 2002; Koivisto Hursti & Magnusson, 2003; Lockie et al., 2004; Arbindra et al., 2005; Padel & Foster, 2005), age (Sandalidou et al., 2002; Arbindra et al., 2005; Zepeda & Li, 2007), education (Cicia et al., 2002; Sandalidou et al., 2002; O’Donovan & McCarthy, 2002; Loureiro & Hine, 2002; Zepeda & Li, 2007), income (Loureiro & Hine, 2002; Sandalidou et al., 2002; Arbindra et al., 2005; Gracia & de Magistris, 2007; Stolz et al., 2011), family or household size (Loureiro et al., 2001; Stolz et al., 2011) and attitudinal (Loureiro et al., 2001; O’Donovan & McCarthy, 2002; Gracia & de Magistris, 2007; Stolz et al., 2011) market segmentation variables for organic food market segmentation.

In this paper will be presented the results of organic food preferences research of young and educated respondents in Autonomous Province of Vojvodina (Serbia). It was investigated whether these respondents segmented into consumers’ segment with low preferences for consuming organic food, consumers’ segment with medium preferences for consum-
ing organic food and consumers’ segment with high preferences for consuming organic food differ regarding chosen socio-demographic and attitudinal market segmentation variables. Besides, implications for the tactical part of marketing will be given.

2. PREFERENCES FOR ORGANIC FOOD OF YOUNG AND EDUCATED CONSUMERS IN AUTONOMOUS PROVINCE OF VOJVODINA

Since young and educated consumers were marked in part of researches as especially in favour of organic food in domestic conditions, it was chosen to conduct research regarding their preferences for consuming this food. The choice of preferences can be understood in context of insufficient organic food supply at domestic market as well as future increasing of respondents’ income as basis for transforming preferences into actual food consumption.

2.1. Questionnaire

The questionnaire consisted of three parts. The first part was related to socio-demographic characteristics of respondents: gender, age, the size of the household and self-assessed household income (from 1 - the lowest, to 5 - the highest mark).

The second part of the questionnaire was designed to research respondents’ attitudes toward health. It was chosen to use the Health sub-scales of the Health and Taste Attitude Scales (HTAS) developed by Roininen, Lähteenmäki and Tuorila (1999) and implemented until now in a number of researches in different countries (Roininen & Tuorila, 1999; Roininen et al., 2001; Zandstra et al., 2001; Teh et al., 2007; Talvia et al., 2011; Chen, 2013). The three sub-scales of the Health questionnaire are: General health interest (8 items), related to an interest in eating healthily; Light product interest (6 items), dealing with an interest in eating reduced-fat food and Natural product interest (6 items), relating to an interest in eating food that does not contain additives and that is unprocessed.

The third part of the questionnaire was related to preferred consumption of organic food in respondents’ households. It was offered them to choose whether they would like to consume organic food never, once in several months, once in several weeks, several times a week, every day or several times a day.

It took from up to 25 minutes for the respondents to fill in the questionnaire.

2.2. Data analysis

At the beginning the respondents were divided into consumers’ segments with low, medium and high preferences for consuming organic food. To consumers’ segment with low preferences for organic food were classified respondents rating they prefer consuming organic food never, once in several months or once in several weeks, to consumers’ segment with medium preferences for organic food were classified respondents rating they prefer consuming organic food once a week, while to consumers’ segment with high preferences for organic food were classified respondents rating they prefer consuming organic food several times a week, every day or several times a day.

Analysis was conducted in order to investigate whether consumers’ segments with low, medium and high preferences for consuming organic food were statistically significantly different regarding chosen socio-demographic characteristics (Table 1). Pearson Chi-Square test was used regarding gender, while One-way ANOVA was used considering age, household size and self-assessed household income.

When considering the Health sub-scales of HTAS, firstly negatively worded items (italic in Table 2) were re-coded. Kaiser-Meyer-Olkin (KMO) test was conducted in order to find out if factor analysis was appropriate. Maximum likelihood factor analysis with Promax rotation was performed for 3 factor solution (Table 2). Cronbach’s alpha was used for testing reliability of each of the sub-scales (in brackets in Table 3). Each of the sub-scales was presented by the mean of statements in it and correlations between sub-scales were computed using Spearman correlation coefficient (Table 3).

In order to investigate whether consumers’ segments with low, medium and high preferences for consuming organic food were statistically significantly different regarding their health attitudes (Table 4) Kruskal-Wallis test was used, while when these differences were established to exist, Mann-Whitney U test was used to compare each segments to one other.

Data analysis was performed by using MS Office Excel and SPSS.
2.3. Subjects

In order to research young and educated respondents in Autonomous Province of Vojvodina, it was chosen to interview students of several faculties of University of Novi Sad. The total number of 140 respondents were recruited in February 2014, by using convenience sampling.

The sample consisted of 27.1% of male and 72.9% of female respondents. The average respondent was 21.32 years old (standard deviation 1.369). The largest percent of households consisted of 4 members (average 4.05; standard deviation 1.020). The average self-assessment of household income was 3.36 (standard deviation 0.679). Considering the structure of the sample (students), it was concluded that it would not be justified to investigate marital status and presence of children in family.

Out of 140 respondents, 22 belonged to consumers’ segment with low preferences for consuming organic food, 33 to consumers’ segment with medium preferences for consuming organic food and 85 to consumers’ segment with high preferences for consuming organic food.

2.4. Results regarding chosen socio-demographic variables

The results regarding socio-demographic characteristics of consumers’ segment with low preferences for consuming organic food, consumers’ segment with medium preferences for consuming organic food and consumers’ segment with high preferences for consuming organic food are shown in Table 1.

Table 1. Socio-demographic characteristics of the segments

<table>
<thead>
<tr>
<th>Socio-demographic characteristics</th>
<th>Consumers’ segment with low preferences for consuming organic food</th>
<th>Consumers’ segment with medium preferences for consuming organic food</th>
<th>Consumers’ segment with high preferences for consuming organic food</th>
</tr>
</thead>
<tbody>
<tr>
<td>gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>male</td>
<td>68.2</td>
<td>33.3</td>
<td>14.1</td>
</tr>
<tr>
<td>female</td>
<td>31.8</td>
<td>66.7</td>
<td>85.9</td>
</tr>
<tr>
<td>age</td>
<td>21.41 (0.796)</td>
<td>21.09 (1.100)</td>
<td>21.39 (1.567)</td>
</tr>
<tr>
<td>household size</td>
<td>3.91 (0.610)</td>
<td>4.18 (0.846)</td>
<td>4.04 (1.159)</td>
</tr>
<tr>
<td>self-assessed household income</td>
<td>3.55 (0.800)</td>
<td>3.42 (0.614)</td>
<td>3.28 (0.666)</td>
</tr>
</tbody>
</table>

The results of Pearson Chi-Square test for gender are: \( \chi^2(\text{df}=2)=26.668, p=0.000<0.05 \). Further testing revealed that statistically significant differences exist between all three segments: consumers’ segments with low and medium preferences for consuming organic food \( \chi^2(\text{df}=1)=6.431, p=0.011<0.05 \), consumers’ segments with low and high preferences for consuming organic food \( \chi^2(\text{df}=1)=27.076, p=0.000<0.05 \) and consumers’ segments with medium and high preferences for consuming organic food \( \chi^2(\text{df}=1)=5.593, p=0.018<0.05 \).

The results of one way ANOVA for age are: \( F(2, 137)=0.611, p=0.544>0.05 \); for household size are: \( F(2, 137)=0.491, p=0.613>0.05 \); and for self-assessed household income are: \( F(2, 137)=1.533, p=0.220>0.05 \). The results show no statistically significant differences between segments regarding previously listed variables.

2.5. Results regarding attitudinal variables

Kaiser-Meyer-Olkin (KMO) test results for Health items (KMO test value of 0.738 and Bartlett’s Test of Sphericity significant at \( p<0.000 \)) indicated that using factor analysis was appropriate.

The Pattern matrix of the Health sub-scales of HTAS with different factor loadings, communalities \( (h^2) \) and percent of explained variance are shown in Table 2.
### Table 2. Pattern matrix of Health sub-scales

<table>
<thead>
<tr>
<th>Health sub-scales</th>
<th>F1</th>
<th>F2</th>
<th>F3</th>
<th>h²</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GENERAL HEALTH INTEREST</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am very particular about the healthiness of food.</td>
<td>.651</td>
<td>.021</td>
<td>.171</td>
<td>0.502</td>
</tr>
<tr>
<td>I always follow a healthy and balanced diet.</td>
<td>.599</td>
<td>-.114</td>
<td>.138</td>
<td>0.406</td>
</tr>
<tr>
<td>It is important to me that my diet is low in fat.</td>
<td>.640</td>
<td>.076</td>
<td>-.007</td>
<td>0.424</td>
</tr>
<tr>
<td>It is important to me that my diet contains a lot of vitamins and minerals.</td>
<td>.773</td>
<td>-.097</td>
<td>-.019</td>
<td>0.586</td>
</tr>
<tr>
<td>I eat what I like and I do not worry about healthiness of food.</td>
<td>.824</td>
<td>.028</td>
<td>-.166</td>
<td>0.656</td>
</tr>
<tr>
<td>I do not avoid any food, even if they may raise my cholesterol.</td>
<td>.626</td>
<td>.072</td>
<td>-.086</td>
<td>0.391</td>
</tr>
<tr>
<td>The healthiness of food has little impact on my food choices.</td>
<td>.603</td>
<td>-.046</td>
<td>-.067</td>
<td>0.348</td>
</tr>
<tr>
<td>The healthiness of snacks makes no difference to me.</td>
<td>.669</td>
<td>.164</td>
<td>-.070</td>
<td>0.481</td>
</tr>
<tr>
<td><strong>LIGHT PRODUCT INTEREST</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In my opinion, the use of light products does not improve one’s health.</td>
<td>.404</td>
<td>.013</td>
<td>.265</td>
<td>0.279</td>
</tr>
<tr>
<td>I do not think that light products are healthier than conventional products.</td>
<td>-.040</td>
<td>-.004</td>
<td>.445</td>
<td>0.192</td>
</tr>
<tr>
<td>I believe that eating light products keeps one’s cholesterol level under control.</td>
<td>-.037</td>
<td>.197</td>
<td>.486</td>
<td>0.288</td>
</tr>
<tr>
<td>In my opinion light products don’t help to drop cholesterol levels.</td>
<td>.279</td>
<td>-.090</td>
<td>.273</td>
<td>0.18</td>
</tr>
<tr>
<td>I believe that eating light products keeps one’s body in good shape.</td>
<td>-.021</td>
<td>.042</td>
<td>.853</td>
<td>0.73</td>
</tr>
<tr>
<td>In my opinion by eating light products one can eat more without getting too many calories.</td>
<td>.101</td>
<td>-.008</td>
<td>.082</td>
<td>0.02</td>
</tr>
<tr>
<td><strong>NATURAL PRODUCT INTEREST</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I do not care about additives in my daily diet.</td>
<td>-.005</td>
<td>.858</td>
<td>-.110</td>
<td>0.727</td>
</tr>
<tr>
<td>In my opinion, organically grown food are no better for my health than those grown conventionally.</td>
<td>-.091</td>
<td>.726</td>
<td>.094</td>
<td>0.542</td>
</tr>
<tr>
<td>In my opinion, artificially flavoured food are not harmful for my health.</td>
<td>.007</td>
<td>.139</td>
<td>.050</td>
<td>0.024</td>
</tr>
<tr>
<td>I try to eat food that do not contain additives.</td>
<td>.063</td>
<td>.500</td>
<td>.049</td>
<td>0.27</td>
</tr>
<tr>
<td>I would like to eat only organically grown vegetables.</td>
<td>.188</td>
<td>.282</td>
<td>.120</td>
<td>0.157</td>
</tr>
<tr>
<td>I do not eat processed food, because I do not know what they contain.</td>
<td>.069</td>
<td>.115</td>
<td>.056</td>
<td>0.026</td>
</tr>
</tbody>
</table>

**Rotation Sums of Squared Loadings**

<table>
<thead>
<tr>
<th></th>
<th>F1</th>
<th>F2</th>
<th>F3</th>
<th>h²</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Variance Explained %</strong></td>
<td>23.76</td>
<td>11.63</td>
<td>8.98</td>
<td></td>
</tr>
</tbody>
</table>

Source: Authors’ research

It can be seen that three-factor solution of the Health items accounted for 44.3% of the variance as well as that in F1 there can be identified high loadings for General health interest, in F3 for Light product interest and in F2 for Natural product interest.

Cronbach’s alphas for Health sub-scales as well as correlations between them are reported in Table 3.

### Table 3. Cronbach’s alphas for Health sub-scales and correlations between them

<table>
<thead>
<tr>
<th>Sub-scales</th>
<th>Mean</th>
<th>General health interest</th>
<th>Light product interest</th>
<th>Natural product interest</th>
</tr>
</thead>
<tbody>
<tr>
<td>General health interest</td>
<td>4.59</td>
<td>(0.863)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Light product interest</td>
<td>4.52</td>
<td>0.183*</td>
<td>(0.647)</td>
<td></td>
</tr>
<tr>
<td>Natural product interest</td>
<td>4.63</td>
<td>0.306*</td>
<td>0.195*</td>
<td>(0.612)</td>
</tr>
</tbody>
</table>

Source: Authors’ research

* Correlation is statistically significant
It can be seen that Cronbach’s alphas for all sub-scales are above 0.6 (confirming their reliability) and that there can be identified low positive statistically significant correlations between General health interest and Light product interest as well as between Light product interest and Natural product interest and moderate positive statistically significant correlation between General health interest and Natural product interest.

Differences in health attitudes between segments can be seen in Table 4.

<table>
<thead>
<tr>
<th>Health-subscases</th>
<th>Consumers’ segment with low preferences for consuming organic food</th>
<th>Consumers’ segment with medium preferences for consuming organic food</th>
<th>Consumers’ segment with high preferences for consuming organic food</th>
</tr>
</thead>
<tbody>
<tr>
<td>General health interest median (mean rank)</td>
<td>4.31 (57.41)</td>
<td>4.38 (64.03)</td>
<td>4.87 (76.40)</td>
</tr>
<tr>
<td>Light product interest median (mean rank)</td>
<td>4.17 (53.66)</td>
<td>4.50 (72.38)</td>
<td>4.50 (74.13)</td>
</tr>
<tr>
<td>Natural product interest median (mean rank)</td>
<td>4.17 (48.73)</td>
<td>4.33 (55.92)</td>
<td>4.83 (81.79)</td>
</tr>
</tbody>
</table>

Source: Authors’ research

The results of Kruskal-Wallis tests show no statistically significant differences between segments regarding General health interest: $\chi^2(2, n=140)=4.938$, $p=0.085>0.05$; nor regarding Light product interest: $\chi^2(2, n=140)=4.570$, $p=0.102>0.05$; but do show the existence of these differences regarding Natural product interest: $\chi^2(2, n=140)=17.292$, $p=0.000<0.05$.

Further usage of Mann-Whitney U test showed that there are no statistically significant differences related to Natural product interest between consumers’ segment with low preferences for consuming organic food and consumers’ segment with medium preferences for consuming organic food ($Z=-0.804$, $p=0.421>0.05$), but that these differences do exist between consumers’ segment with low preferences for consuming organic food and consumers’ segment with high preferences for consuming organic food ($Z=-3.341$, $p=0.001<0.05$), as well as between consumers’ segment with medium preferences for consuming organic food and consumers’ segment with high preferences for consuming organic food ($Z=-3.172$, $p=0.002<0.05$).

2.6. Discussion and recommendations

Firstly, it can be seen that the greatest number of respondents (85 out of 140) belong to consumers’ segment with high preferences for consuming organic food, who prefer consuming this food at least several times a week. They are followed by 33 respondents belonging to consumers’ segment with medium preferences for consuming organic food, who prefer consuming this food once a week. These results are confirming some previous researches stating that young (Vlahović et al., 2010; Vlahović et al., 2011) and more educated people (Renko et al., 2011; Vlahović et al., 2011) were oriented towards accepting organic food.

The results of the research show that out of socio-demographic variables, identified segments were statistically significantly different only regarding gender – the percent of women was increasing in segments more preferring organic food. This is in accordance with researches pointing out women being more in a favour of concept of organic food (Koivisto Hursti & Magnusson, 2003; Lockie et al., 2004; Arbindra et al., 2005; Padel & Foster, 2005). Although expected that there would be no differences between respondents belonging to different segments regarding age, since they all were of the similar age, there are also no differences related to income or household size.

Considering attitudinal determinants, it can be seen that it was appropriate to use the Health sub-scales in researching young and educated domestic consumers as well as that consumers’ attitudes reflecting their Natural product interest were significant for organic food preferences – consumers’ segment preferring organic food highly was statistically significantly different in comparison to other segments in terms of respondents rating these items higher. This is in accordance to researches pointing the significance of consumers’ attitudes for accepting organic food (Loureiro et al., 2001; O’Donovan & McCarthy, 2002; Gracia & de Magistris, 2007; Stolz et al., 2011).

Having in mind that women and respondents more interested in natural products are at the same time more preferring organic food, implications on tactical marketing i.e. for marketing mix can be given. For example, the visual identity of organic products could be build based on colors reminding on nature and more “gentle” alphabet that could be attractive.
to women. These products can be distributed in separate corners of supermarket and girls of similar age as respondents, to whom there should be no barrier in communication, could inform target segment on benefits of consuming organic food. In these products’ commercials could also be present young girls in natural ambient suggesting they are using organic food as a manner to consume natural products. Marketing public relations should be focused on presenting the characteristics of organic agriculture as natural agricultural method. Famous persons which have image of people being connected to nature could also promote their own usage of this food in radio and television shows. Broadcasting promotion messages should be in period of TV and radio programs watched or listen by targeted segment.

3. CONCLUSION

In this paper were presented the results of the research regarding organic food preferences of young and educated respondents in Autonomous province of Vojvodina (Serbia) in February 2014 (n=140).

Most of the respondents, who were segmented into consumers’ segment with low preferences for consuming organic food (prefer to consume it once in several weeks or less frequent), consumers’ segment with medium preferences for consuming organic food (prefer to consume it once a week) and consumers’ segment with high preferences for consuming organic food (prefer to consume it several times a week, every day or several times a day), belong to the last segment – 85 of them, and to the one before – 33 of them. It confirmed the results of previous researches according to which young and more educated people were more in favour of organic food in domestic conditions.

Comparison of the segments, established based on consumers’ preferences, revealed that the percent of women was increasing in segments more preferring organic food as well as that respondents rating higher items measuring their natural product interest were more present in segments more preferring organic food.

Having in mind the results of market segmentation research (belonging to strategic marketing), implications on tactical marketing i.e. for creating, implementing and controlling marketing mix were given within the paper.

LITERATURE


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ABSTRACT
This paper aims to present the Neuro-linguistic programming (NLP) communication techniques which can be used by people in business or in academia. NLP gives reasonable and affordable solutions to a variety of communication problems. It provides suggestions for further individual improvement and research. Through this practical discipline people can achieve more flexible thinking, self-discovery, and develop their communication strategies and presentation skills. The author aims to critically distinguish between the NLP techniques for perfecting presentation skills and the NLP techniques used for other problematic areas. The research methodology includes an overview of the different methods NLP uses to enhance modelling practices, behavioral development and strategic understanding. The paper highlights the NLP strengths and varieties of instruments, techniques and processes to improve presentation skills and to bring them on another level.

KEYWORDS: presentations, presentation skills, communication, Neuro-linguistic programming, NLP, development, management, interpersonal communication.

1. INTRODUCTION

Neuro-linguistic programming (NLP) was created in the early 70s of the 20th century in the United States by Richard Bandler and John Grinder with the cooperation of a large group of professionals, including Milton Erickson, Virginia Satir, Robert Dilts and Judith Delozie. The basis of NLP stands in retrieving a model of high professionals in their field and establishing how they do what they do (even if the person in question does not know what he actually does).

The motivation to write about this topic comes from the fact that the author of the paper is a certified master practitioner of NLP and uses NLP techniques on a daily basis in the teaching process, in the business practice, as well as in therapy sessions.

Everyone has a model of the world based on their values, beliefs, behavior, experience, etc. This is an individual model, which differs from the other, in a certain aspect, or completely. The reason is that the experience each person has acquired is different, and therefore the ways in which he interprets these experiences are different. Even people who shared the same experience perceive and remember things differently. A song or a picture can create totally different feelings, moods, emotions and reactions in different people because of the individual response to them.

The Institute of Neuro-Linguistic Programming gives the following definition of the term: “Neuro-Linguistic Programming (NLP) is an exploration and change in the real-life behavior through a set of principles, techniques and behavioral techniques. It allows people to change, adopt or eliminate habits and offers a choice for everyone’s rational, emotional and physical status”. This definition reveals the nature and purpose of the use of NLP.

Analyzing these definitions of NLP can draw the following conclusion: NLP is a model that explores the links between the way the physiology and the brain work (neuro), how we use the words (linguistic), and the accepted patterns of behavior (programming). In other words, NLP is a set of models that make up the approach to success that can be applied in every sphere of reality and most important — in business.

The attractiveness of NLP comes from its interdisciplinarity, and the complex process in which the orderly and systematic components of other areas are related to the business practice.

In recent years, specific directions in the development of NLP include links to the typology of the Myers-Briggs, problem solving, training in interpersonal relations, leadership, self-improvement, establishing strategies and skills to influence.

The basic attitude is curiosity. Curiosity asks “How do they do it? How to achieve such results?” for people who do something very professionally and with remarkable skill.
Broadly speaking, the theory and practice of NLP helps in:

- establishing and improving personal relationships;
- developing talent for persuasion;
- transition to a positive perception of the world;
- increasing the level of self-esteem;
- overcoming the consequences of negative experiences in the past;
- focusing on objectives and mobilization of internal forces for their achievement;
- acting with maximum efficiency;
- managing feelings;
- coordinating the objective personal beliefs and values;
- removal of unwanted habits;
- improved relationships with clients and colleagues;
- faith in oneself;
- applying a creative approach to problems;
- effectively managing personal time;
- the development of such qualities and character traits that arouse admiration for others;
- more pleasure from life

2. NLP TECHNIQUES FOR PERFECTING PRESENTATION SKILLS

This paper will briefly look at NLP techniques which could be useful in improving presentation skills and will present a more detailed analysis of the techniques are more relevant in the process of perfecting presentation skills:

- Meta model are specific meta questions used in the detection of limiting beliefs. At its core is a study of the linguistic models to detect unconscious constraints, violations and generalizations. There are twelve such models, and each of them has different questions to identify limiting beliefs.

- Reframing (also called change of frame) is used in removing negative statements about someone or something. The technique is often used to reframe a certain context so that the other person can reframe his perception about it as well.

- Rapport - this technique is used in establishing rapport. The essence of rapport is a copy of the external aspects and the condition of the person one communicates with and its further adaptation to change the internal state. One of the concepts of neuro-linguistic programming, which can be applied to improve presentation skills is that people perceive better people who are alike and become attached to alike. It is therefore necessary when an individual wants to appeal to a person or audience to strive to “look like” them, to unify with them - given not only the tone of voice or gestures, but also body language, facial expression, gesture, and other broadcast verbal and nonverbal signals.

- Using this approach, the presenter may involve the audience more quickly, making the audience like and sympathize with him. Alignment should not be done immediately, but gradually, partly because the individual who practices it can out of its so-called.“comfort zone.”

- Calibration is used to raise awareness about their own situation and others. Calibration is the careful monitoring of the opponent and oneself and adapting to the physical and emotional state in order to study the body language.

- Stories and metaphors are used in the form of indirect communication. The application of the technique lies in the attempt to find common solutions.

- Embedded commands is a hypnotic NLP technique. It is used as an impact on the behavior.

Today NLP is taught and practiced by millions of people around the world in almost all spheres of human activity - management, sales, marketing, public relations, education, therapy, gender relations, military, politics, special services, sports, and of course relating to each individual’s personal development.

More and more leading companies worldwide seek the benefits of NLP, and Ronald Reagan was the first politician to hire NLP consultants. Boris Yeltsin also used specialists in NLP techniques in communication during election campaigns.
2.1. Modelling

The basis of the method of NLP is a methodology called “modelling” which Richard Bandler and John Grinder used to explain the known scientific experiments of Milton Erickson, Fritz Perls and the family therapist Virginia Satir. The process of modelling is to study people who are examples of excellent performance, to ask questions and to monitor whether doing the same thing, other individuals will achieve the same results.

The philosophy of NLP, shown below, indicates that it can be used to improve presentation skills.

-“... Our thoughts and experiences are reflected in physiological and gestures, body movement, eyes, head, breathing, tone, strength, tone of speech. Watching them change and we can influence our subjective experiences setting.”

-“... Our inner experiences are reflected in the language that we speak. By changing the way you talk, we can modify not only their own subjective experiences, but also the feelings and reactions of others.”

-“... We can change and direct their own thoughts and behavior, and that of others in our desired direction, as the computer is programmed to do certain things.”

It is believed that any action of the people, regardless of how complex, can be reduced to a specific structure to be repeated by other people, if given this structure as a behavioral model. The aim is to create an effective pattern of successful individuals, and this model can be used for “programming” of others who would like to use it.

The effective implementation of this method in business requires consideration of such important aspects as management goals and objectives, management styles, work motivation and resistance, skillful and effective communication and persuasion.

Modelling detection means and describes the basic elements and processes through which people go to do something. The process begins with the identification and the study of the human model. This is an individual who does something in a particular, usually highly skilled manner (a model). For example, if someone wants to know how to be very successful in presenting (a modeller), he has to find a proven expert who knows how to present extremely well. Then the modeler should ask a lot of questions about what the model does, why he does what works and what does not, etc. At the same time the process of modelling often will lead to new and more relevant questions to be asked in the process operation. The addition the above mentioned NLP techniques make it possible to discover much of what makes this human model, even things about which the model is not even aware of.

When the whole process is done properly, using the time and technology and applying sensible logic, the result will be a new business model. This new model is actually a set of instructions. If it is good, it can be used by anyone who wants to duplicate the skills and abilities of the human model used as the initial subject. In other words, anyone can be so good at anything if a highly professional model is used. Of course, this requires effort and practice, but they are much less than if a training is applied or other more traditional ways of perfecting a skill.

Modelling involves a process of observation:

1. Monitoring the physiology of the model.
2. Study the language the model uses (words, structure of the speaking and performance).
3. Study the thinking of the model.

A notable element of the modelling is that if the modeller accepts the model’s physiology, uses the language in the same way and applies the structure of thinking in the same way, the modeller will get very similar results to the ones of the model.

Modelling is an approach similar to the four-model for success. It involves the use of sensory acuity and flexibility in terms of change. Moreover, the approach is based on the differences - what is the thing that makes a man different and that affects his behavior, his success or failure. In other words, what is the difference that makes the difference? This model does not attempt to answer the question why, but rather the question of how.

Thus, according to the model, successful presentation will be the result of continuous feedback between the model and the modeller and the actions taken to achieve the excellence.

When modelling an excellent presenter, the modeller should keep in mind that very often the model is not aware of what exactly he is doing, because perfection requires possession of unconscious competence. After achieving approximately the same results as the model, the modeller has to start making changes until he finds the best strategy for achieving
results and presentation skills. If removing an element affects performance, it may be the key to achieving better results and to build on a better strategy. Thus, the idea of modelling is open for constant refinement.

The process of modelling presentation skills goes through several stages:

1. First we need an excellent presenter who serves as a model. It is not important whether the model is good in other skills, or whether he is only a good presenter. Next is to have access to this model – we need to make sure that the possibility of careful observation exists, possibly without the model feeling watched. If there is an opportunity to talk with the model, one may reveal the values and beliefs that support the particular skill – the presentation skill.

2. The next elements of the modelling is to observe how the model applies their skills by “absorbing” the sequence.

3. Then, the modeler must take the role of the model, but dissociated - as if seen from the side.

4. Next step is for the modeler to repeat the sequence of steps of the model, but looking through his own eyes and feeling what it would be until the same modelling skill is applied. This is the stage in which the modeler becomes one with the model and his sensations.

One could never achieve complete perfection. But nothing can go wrong when one imitates because imitation is also a process of learning.

**Advantages and disadvantages of modelling**

The modelling process has undeniable advantages, namely the ability to draw a perfect model for each action. In the context of improving the presentation skills modelling promotes improvements in many empirical researched presentation skills.

The disadvantages of the method stem from the subjectivity of the overall approach, as each individual has a perception of what is happening in the surrounding environment. Even with a perfect role model, modelling always brings its own experience and the model undergoes changes.

**2.2. Representative systems**

There are people who attend a presentation, because they respect the speaker - knowing that they will learn something useful and will be entertained. But the main reason why someone chooses a presentation is that they are interested in the content of the message. Presenters must ensure that words work for them in the transmission of the message.

One of the important insights arising from the use of the representative systems, is how is it possible to have different ways of thinking and different ways of doing things. All people have different models of the world. Some prefer to see things, while others prefer to touch regardless of the context. Prior to realizing the enormous diversity of human experience, one might think that people are almost the same. But the more we learn about these distinctions, the more we realize how fundamentally different people actually are.

The NLP communication model presents the six things that a person can do in his mind at a time: (1) to see pictures - visual, (2) to hear sounds - auditory, (3) to have feelings - kinesthetic, (4) to talk to himself – auditory digital, (5) to smell or (6) to taste. The first four are the representative systems which are a dominant form in the culture.

Anyone can use all four representative systems, but generally people use one representative system more than others. It is most easy to call this the preferred representative system. Some prefer to think in pictures, others in sounds, third in feelings and fourth in words - through conversation with themselves or logical analysis. The participants in a presentation want to receive information presented in a form that corresponds to their preferred representative system. Each audience is likely to have a mix of all four preferences. Perhaps they are not evenly distributed, but each is present to some degree.
Classification of the representative systems

Each person uses the sensory organs to perceive the outside world, to study and to witness its transformation. Eyes, mouth, nose, ears, skin are the only point of contact with reality. The world offers an infinite variety of sensory events, but we can see only a small part of this diversity. And the part that is seen is filtered by a unique experience, culture, language, beliefs, values and assumptions of each individual person. Everyone lives in their unique reality based on individual experience and acts accordingly, relying on this reality, and the own model of the world.

Everyone uses the same neurological pathways for internal representation of the experience and for its direct experience. Same neurons generate electrochemical discharges that can be measured. Everyone uses their sensory organs with an external method to perceive the world, with an internal method to “the representation” (present) experiences himself. The methods for obtaining, maintaining and coding the information in the mind into pictures, sounds, feelings, smells and tastes are known as representative systems.

The visual system may be used by the external process when considering the world, or internal, as will appear. Similarly the auditory system can be divided into listening to external sounds or to internal. External kinesthetic include tactile sensations: touch, temperature, humidity. Internal kinesthetic includes internal memories of feelings, emotions, inner feelings of balance and awareness of the condition of the body. Tastes and olfactory system are also included in the kinesthetic system. They often serve as powerful and very fast associations with images, sounds and feelings associated with them.

Everyone uses all three (visual, auditory, and kinesthetic) representative systems constantly while not realizing it equally and tends to favor one over the other. For example, many people have an inner voice that arises in the auditory system and creates internal dialogue.

Representational systems are not mutually exclusive. A person can be visualizing a scene in order to associate with the feelings and simultaneously the person can hear sounds, although it may be difficult to focus on all three systems at the same time. Any part of the thought process would still be unconscious.

Visual preferred system

In presentations where it is necessary to convey information to people with visual preferred representative system, it is better to use visual language to display pictures, videos, brochures illustrated with photographs or diagrams, and to “paint” pictures with words (e.g. How do you see this?). The use of the words listed below in the context of the presentation can help affect this part of the audience which is with prefered visual perception.

Figure 1. Visual words

| see    | colored | insight | watch  | image   |
| view   | view    | reflect | show   | sparkle |
| vision | dark    | flicker | Light  | delineation |
| look   | disclose| illuminant | radiant | shine through |
| picture| filmy   | burn out | bright | pierce |
| focus  | glimpse | imagine | shine  | bright |
| review | Peering | crystal clear | scene  | transparent |
| perspective |    | impenetrable | dim    | specular |
| flashes |    | frame    | muted  |         |

Source: Shephard, J., Presenting Magically: Transform your stage presence with NLP”, NLP Bulgaria, 2010
Auditory preferred system

For this part of the audience it is important how things sound. They love to hear others tell them, tell them stories, live or on audiotape. They are set up to capture the tone of voice that may be music to their ears or muffled sounds, or even ironic. They listen for others who speak “their language”. In the presentation to the auditory people it is important to sound good, supported by music, to apply rich tone of voice and to use words related to sounds (e.g. How does that sound?). The use of the words listed below in the context of the presentation, will help affect this part of the audience, which is preferably auditory perception.

Figure 2. Auditory words

<table>
<thead>
<tr>
<th>hear</th>
<th>say</th>
<th>expressly</th>
<th>piercing</th>
</tr>
</thead>
<tbody>
<tr>
<td>listen</td>
<td>snap</td>
<td>talk</td>
<td>cacophony</td>
</tr>
<tr>
<td>sound</td>
<td>vibrant</td>
<td>hard</td>
<td>noise</td>
</tr>
<tr>
<td>tone</td>
<td>rhythm</td>
<td>scrape</td>
<td>quiet</td>
</tr>
<tr>
<td>accent</td>
<td>harmony</td>
<td>dialogue</td>
<td>melody</td>
</tr>
<tr>
<td>music</td>
<td>tune</td>
<td>hoarse</td>
<td>murmur</td>
</tr>
<tr>
<td>call</td>
<td>disharmony</td>
<td>ding</td>
<td>chatter</td>
</tr>
<tr>
<td>upset</td>
<td>melodic</td>
<td>euphony</td>
<td>rapport</td>
</tr>
<tr>
<td>jingle</td>
<td></td>
<td>dissonance</td>
<td>soundless</td>
</tr>
</tbody>
</table>

Source: Shephard, J., Presenting Magically: Transform your stage presence with NLP”, NLP Bulgaria, 2010

Kinesthetic preferred system

These are the people in the audience who have more sense of things. In this type of presentation the presenter is allowed to use physical touch (through demonstrations, etc.), and using language based on the words of sensation (e.g. Do you feel it?). The use of the words listed below in the context of presentations, affect the part of the audience, which is with preferred kinesthetic perception.

Figure 3. Kinesthetic words

<table>
<thead>
<tr>
<th>feel</th>
<th>touch</th>
<th>smooth</th>
<th>solid</th>
</tr>
</thead>
<tbody>
<tr>
<td>grab</td>
<td>pressure</td>
<td>hard</td>
<td>tight</td>
</tr>
<tr>
<td>pull</td>
<td>handle</td>
<td>passionate</td>
<td>soft</td>
</tr>
<tr>
<td>get</td>
<td>texture</td>
<td>sting</td>
<td>hardy</td>
</tr>
<tr>
<td>rub</td>
<td>heavy</td>
<td>contact</td>
<td>sharp</td>
</tr>
<tr>
<td>sticky</td>
<td>unshakable</td>
<td>scabby</td>
<td>rebound</td>
</tr>
<tr>
<td>hookup</td>
<td>glide</td>
<td>thick</td>
<td>stump</td>
</tr>
<tr>
<td>accept</td>
<td>slippery</td>
<td>totter</td>
<td>beat</td>
</tr>
<tr>
<td>warm</td>
<td>catch</td>
<td>obstacle</td>
<td>fling</td>
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<td></td>
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</tr>
</tbody>
</table>

Source: Shephard, J., Presenting Magically: Transform your stage presence with NLP”, NLP Bulgaria, 2010
Auditory – digital (digital audio) preferred system

So far there were presented three types of representative systems. But scientific studies have proven the existence of a fourth type of perception of the environmental reality - auditory digital. These are the people in the audience who most often speak for logic, search for sense and reasonableness of the information provided. They want facts confirming the numbers and statistics, theoretical assumptions presented by logical analysis and structured arguments. These inferences and applied trends are based on an extrapolation of the data in question (e.g. Can you tell me what you think?). The use of the words listed below in the context of the presentation affect this part of the audience which is with preferred auditory digital perception.

Figure 4. Auditory – digital words

<table>
<thead>
<tr>
<th>main</th>
<th>specific</th>
<th>understand</th>
<th>idea</th>
<th>learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>procedure</td>
<td>interesting</td>
<td>integrated</td>
<td>interactive</td>
<td>modular</td>
</tr>
<tr>
<td>trend</td>
<td>obvious</td>
<td>growing</td>
<td>balanced</td>
<td>virtual</td>
</tr>
<tr>
<td>knowledge</td>
<td>random</td>
<td>enhanced</td>
<td>variable</td>
<td>added value</td>
</tr>
<tr>
<td>model</td>
<td>special</td>
<td>systematic</td>
<td>ecological</td>
<td>applications</td>
</tr>
<tr>
<td>theory</td>
<td>typical</td>
<td>optimum</td>
<td>border</td>
<td>flexibility</td>
</tr>
<tr>
<td>principle</td>
<td>common</td>
<td>compatible</td>
<td>reciprocal</td>
<td>concept</td>
</tr>
<tr>
<td>importance</td>
<td>excellent</td>
<td>paradigm</td>
<td>transitional</td>
<td>framework</td>
</tr>
<tr>
<td></td>
<td>think</td>
<td>emergency</td>
<td>experience</td>
<td>logical</td>
</tr>
</tbody>
</table>

Source: Shephard, J., Presenting Magically: Transform your stage presence with NLP", NLP Bulgaria, 2010

Application of the representative systems

Every information presented passes through a number of compulsory stages: introduction, processing and evaluation. In this regard, there are three separate systems of activity of the human brain: a leading (data entry), preferred (presentation of information in the mind) and reference (evaluation of the information). Each of these systems can be represented visually, kinesthetically and auditory.

Each individual uses all channels of perception, even though depending on the situation he pays attention more to one channel than to another. For example the art gallery is located in the visual channel, the world of the concert - in the auditory. When we think, regardless of the subject of reflection, we always stick to one representative system.

Usually this preference occurs between the ages of 10 and 12 years. Many people can create clear mental images and think in pictures. For others it is more difficult. When a person has a tendency to stick to one channel of perception, then in NLP that channel is called a preferred system. In the presentation process taking into account the representative systems of the audience, helps the presenter to build a better image and to construct a better presentation is.

Advantages and disadvantages of the application of the representative systems

The advantages of this technique of NLP stem from the fact that they give knowledge about all channels of perception, and this creates conditions for forming the content and structure of the presentation for clear and convincing speech, and also helps to simplify the communication messages.

Disadvantages of this technique are not known. However, there are people who perceive NLP as a very subjective method and the same distrust can be applied to the representative systems being part of NLP. Sometimes the usefulness of the technique is reduced because it is seen as complex and incomprehensible.
CONCLUSION

The author of the paper believes that everyone can improve their presentation skills through the presented NLP techniques. NLP trainings are widely available but each individual can also improve his presentation skills through self-development. The modelling process requires a strong motivation and a lot of observation. The representative systems require a systematic study of the theoretical principles and constant application.

The effectiveness of modern managers requires on one hand - to keep up-to-date with the current global trends, to follow the development of new information and communication technologies, and on the other hand - to not underestimate the direct communication and direct contact with employees and other audiences, and that one of their most important functions is to motivate their subordinates - to face up to them, to inform them, to persuade, and to inspire others. This requires the presentation skills that can be called critical to the success of any manager in the modern era.

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KNOWLEDGE MANAGEMENT AS A FUNCTION OF COMPETITIVENESS
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ZVONKO NOVOSEL

ABSTRACT
The interweaveness of world processes in the globalization area has a very strong influence on knowledge dissemination through information and communication technologies. The opportunity to an accelerated development is first and foremost used by the rich countries of the world, but developing countries also have the opportunity of being involved in this worldwide process. Thus, classical economic paradigms are modified to benefit the economy and the knowledge management. Analyzing global competitiveness, the influence of intellectual capital is dominant over the general competitiveness of national economies. Knowledge management integrates human equity (abilities, education, skills) and business organization on overall acceptable manner with its strategies. Investing into education, research and technological infrastructure opens up competitive advantages of each economy.

KEYWORDS: globalization, human equity, competitiveness, management.

1. INTRODUCTION

Industrialization has triggered a new culture, a culture of industrial society. Scientific circles recognize it under the term “mass culture”. By defining the values and norms of the modern industrial society, they contribute to the growth of civil progress. “The increase in education even of the lower social classes and the increasing penetration of science into the human thought have set new basis of self-determination of the individual in the society. Industrialization and the expansion of cities have influenced the growth of education, ie workforce training through specialized education. Professional occupations have become versatile, and workplaces are often remote, making it impossible to transfer working skills from parent to child”.

The information revolution of the twentieth century is easily called the Second Industrial Revolution. Based upon specific technological discoveries (microchip), as well as the previous Industrial Revolution (the steam engine), the information revolution leads to an overall increase in productivity and competitiveness of the global economy.

Along with the versatile industrial and information technology progress, the globalization process is accelerated. If globalization is regarded as a process of linking economic and financial currents in the global space, then it shows a perturbing aspiration to unify the markets and the expansion of economic activity to a global scale, is outside the borders of national economy, as well as strengthening the independence in global economy. “Globalization is often regarded as liberalization or as a reductant of trade barriers, eliminating restrictions on direct foreign investments, reducing capital control and abolition of visa barriers. This definition is the closest to the neoliberal understanding of globalization that is devoted to deregulation, privatization and fiscal discipline on a global level”.

Anthony Giddens emphasizes 3 characteristics which contribute to the importance of knowledge: globalization, new forms of organization and expert systems. New organizations require new styles of management which often depend on information about possible information and communication technologies - ICT to monitor and control operations.

These organizations function best on a global scale. What is essential to them is he flexibility of action in various environments and cultures, as well as readiness to resolve possible conflicts with the local environment. Neoliberalism sees new forms of economical regulations which often depend on the usage of information and data to show situations in organizations - especially in the public or almost private sectors. We depend more and more on the knowledge of experts which is quite often build into the product or service we use.

1 Giddens, E. (2010), Sociologija; Ekonomski fakultet; Beograd
2 Vuletić, V. (20019); Globalizacija; Zavod za udžbenike; Beograd
3 Mutch, A. (2008); Managing Information and Knowledge in Organisation; A literacy Approach, Routledge; New York
2. ECONOMICS KNOWLEDGE

Globalization, strong and fast development of information technologies and changes in production and services has brought to the development of the economy of knowledge. The most important role in the economy is in the hands of workers with knowledge. According to the available global data, the most dynamic sectors of this new economy are: computer science, finance, software and telecommunications. Since the economy of knowledge is in its early stage of development, further increase in the numbers of workers in that field of work is expected.

The process of creating knowledge is a human process, not a technological one, thus creating a new discipline - knowledge management. Knowledge management attempts to optimally manage people with knowledge, learning organizations and effectively uses information technologies.

Knowledge implies accumulation of information and the mental structure for its acceptance. Bertrand Russell (2007) claims that knowledge appears in the form of observation, memory, habit, belief and conviction of learnt knowledge or expectation. “Every knowledge concerning of that which exists in this world, if not related directly to facts through observation or memory, has to be derived from thoughts in which at least one is known through observation or memory. I do not believe there is a perfect method for proving the existence of anything, but I do believe that forms of probable inferences which have to be accepted, although they could not be proved through experience”. 4

The amount of equipment and objects used for manufacturing goods and services are called “physical capital” or just “capital”. According to many authors, universally speaking, capital is any investment of specific resources with an expected return on the market. In regards to the aforementioned definition, it should be emphasized that resources are not only reduced to financial, or that gain is reduced only to profit, and the market has a wider scale than the economic market. In the modern organization, it is essential to have qualified people on every level. Companies of the industrial era have created intellectual elite - executives and engineers - which have used their analytical abilities to design products and processes for managing their relations with the clients and to monitor daily work processes.

Since the beginning of the 21st century there has been less need for traditional work functions and the increasing need for people who manage analytical functions, such as engineering, marketing, management and administration. Their task is to think, solve problems and secure quality throughout the whole organization. “Investing into education and training of the employees, using knowledge and knowledge management, have become the key success factors of companies revolving information societies. 5

2.1. Information technology

Today’s society is marked by quick changes, new technologies and new ways of doing business. Hartley John, the general director of the European Agency for Employment says: “In this new world the winners are those who draw to them those with the most talent, those who are the most resourceful and who transform their way of conducting business so that they would bring real and durable value to consumers. Significant people, not capital, will be in the focus of future investments. Our philosophy of past times has been that people were always in the spotlight, and our future strategy will show that.” 6

A lot of managers responsible for human resources do a thorough analysis of the person and the job. A precise matching a person’s knowledge profile, abilities and skills to the appropriate job is not an easy task. Here is where skills related to specific tasks become apparent, such as motor skills, collecting and processing specific information and communication skills. Common knowledge and experience, social skills, personal values, beliefs and attitudes are less important. On the other hand, there is a belief that when choosing a manager, attention should be averted to their way of thinking, attitudes, social skills and general approach to success in every line of work.

Influence of information technologies is very high in today’s world. There is not a company that can avoid its effects. Dramatically reducing the cost of obtaining, processing and transmitting information changes the way business is handled. Managers should be aware that technology cannot be in exclusive jurisdiction over organizational units for electronic data processing. It can be seen that more advanced companies use information for gaining competitive advantage in every working aspect. Information and communication technology develop faster than technologies used for physical process of materials. Expenses are reduced and the limits for processing and transferring information are expanding quickly. For managers this means exploring new possibilities. A space for a more comprehensive analysis and use of the detailed data is created, and finally the new technologies have a strong impact on increasing competitiveness. Traditionally, international competitiveness among countries is explained through theories of international trading, which origin from Adam Smith.

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4 Russell, B. (2007); Moj filozofski razvoj; Izdavačka knjižarnica Zorana Stojanovića; Sremski Karlovec; Novi Sad  
5 Kaplan, R., Northon D.F., (2010); Upravnotežena tablica rezultata; Harvard Business School Press; Boston Massachusetts; Mate, Zagreb  
6 Hartley. J., (2007); Kreativne industrije; Clio; Beograd
A Harvard professor Michael Porter, in his classic piece Competitive Advantage, proposes the theory of competitiveness, according to which national welfare is not inherited but created through strategic choices. In the past, a country’s development was based upon its comparative advantages, such as cheap labor and natural resources. Today, the advanced conditions based on knowledge, highly developed infrastructure, high technology and innovation are considered as a basis for economic development. According to Porter, the most important role of a country in its economy is the achievement of macroeconomic and political stability.\(^7\) It is achieved by establishing stable government institutions, well-balanced and proper economic framework, as well as healthy macroeconomic policies, which include sustainable national budgetary frameworks and low inflation.

The second role of a country is improving general microeconomic abilities of the economy. This is accomplished by increasing the efficiency and quality of investment in education, technology and infrastructure, and the correct and timely economic information. Also, strengthening institution which provides these activities is also important. Third role of a country refers to establishing general microeconomic policies and incentives targeting competition that provides productivity growth. The rules are following: policy of competition that ensures rivalry, tax system, laws on protecting intellectual property, fair and efficient legal system, laws on consumer protection, rules regarding corporate managing, effective regulatory processes that encourage innovation, labor policies that encourage development of human capital and many others.

On the other hand, instability and insecurity, political distrust, government ownership, trading barriers, limiting factors for foreign investment, corruption, bureaucracy and other may have a very negative impact on competitiveness. Indispensable conditions, in order for a valid consideration regarding competitiveness issues, are a country’s peace and security. According to Hobbes’ theory of governance, conflicts and wars are caused by humans’ imperfect natures. There are no logical activities in that state because the results are uncertain. Production, import and export of goods are disrupted, communication channels are unstable, and there is no major contraction, no new technologies, no art or literature. In one word, there is no society, and the worst thing is the incessant fear and danger of sudden and violent death. In such conditions, a human’s life is lonely, poor, hard and uncertain.\(^8\)

### 2.2. Definition of competitiveness

World economic forum defines competitiveness as a group of institutions, regulations and other factors that determine the level of productiveness of a country. Competitiveness in regards to the forum is studied for over thirty years.\(^9\) Competitive data are politicians’ and legislators’ tools for defining and improving competitiveness. Index of global competitiveness is a very advanced and detailed index for measuring competitiveness of countries, taking in regard macro and microeconomic factors. Some of the best economic experts have tried to examine what makes a country rich. Adam Smith’s opinion was that perfectioning and dividing the work lead to a dramatically improvement of productivity. Neoclassical economists emphasize the significance of investments into capital and infrastructure. Modern economists were not pleased with such theories, and have observed other mechanisms: education and training (human capital, as they call it), technological advances, macroeconomic stability, good governing, rules of law, transparent institutions that function well, corruption of the system, orienting to market economy, developed infrastructure, etc.

Index of global competitiveness measures the average of many components, grouped in twelve areas, every one of which keeps an aspect of the complex reality called competitiveness.

#### 2.2.1. Institutions

First area - institutions: Institutional framework implies a guarantee of landowners’ rights, intellectual property, legal certainty in purchasing and selling of assets, ratio of state to market freedom, efficient administration. Business activities are tied by too big of administration, a large amount of unsynchronized regulations, corruption, non-transparent conclusion of public contracts, lack of informed public and questionable politicians’ integrity and political dependence of the judiciary. All these mentioned shortages impose increasing economic costs and slow down the process of social development. Business serves well to the economy if it is conducted fairly and it the managers comply with strict ethical principles.

#### 2.2.2. Infrastructures

Second area - infrastructure: An ensuring electric energy and other communal infrastructures are the basis for a country’s undisturbed production, providing services and developing. A quality infrastructure integrates national markets and links them to other countries’ markets. A well developed transport and communication infrastructure is the basis for a quality business conduct between markets and export increase.

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\(^7\) Porter, M., (2007); Lokalni klasteri u globalnoj ekonomiji; Kreativne industrije; Clio; Beograd

\(^8\) Marvin, P., (2000); Intelektualna historija Europe; Clio; Beograd

\(^9\) World Economic Forum; Internet adresa: http://www.webforum.org/
2.2.3. Macroeconomics

Third area - macroeconomic: Business subjects cannot make proper quality decisions, as well as plan their own growth, if the inflation rate is expressed in high index points. The financial sector cannot function if the ones managing are creating high state deficits. The government cannot make rational decisions if they have to pay high interest rates from the past. That concludes that the economy cannot grow if the microenvironments are not stable and conductive.

2.2.4. Health and basic education

Fourth area - Health and basic education: A worker’s poor health creates additional expenses to business entities. Investments in health are very important in economic and morally-social aspects. Education is strengthening key to the quality of life and ensuring an overall social and economical growth. Poorly and insufficiently educated workforce can perform only simple tasks and adjustment to new and modern technologies is harder. A poorly qualified administration staff can also have a negative impact on business results.

2.2.5. High education

Fifth area - high education: The quality of high education is especially important for countries which want to advance their economy with new technologies. In the world of global economy, it is preferred that the employees are constantly adjusting to the environment in which they are working, which is ever-changing. This area is defined through admission quotas in the educational system, the quality of the learning process and assessment by the working community. Improvement of expertise at all levels of organizational processes is an important factor that ensures upgrading skills and knowledge of the employees, all in accordance with the needs of the manufacturing process.

2.2.6. Efficiency of commodity markets

Sixth area – efficiency of commodity markets: The economies of countries with developed markets which have a large and wide range of products and services can be defined as competitive. Namely, competitiveness is reduced by large taxes, restrictive and discriminatory behavior in terms of foreign competitors or preventing foreign investment in the domestic market. The efficiency of the market is dependent on demands of consumers. By globalizing the market, the population sets the market rules.

2.2.7. Efficiency of labor market

Seventh area – efficiency of labor market: The efficiency and flexibility of free movement of the workers in the labor market is crucial for locating business entities. The labor market has to be defined in that regard in which it has the flexibility and the possibility of rapid changes in economic activities, but under the condition that there is no serious social disruption. Efficient labor markets ensure to those most capable to become apparent, and gender equality is expressed in equal access for men and women that are competing in the labor market.

2.2.8. Perfection and refinement of financial market

Eight areas - perfection and refinement of financial market: It implies to an efficient financial market in which resources and the people’s savings deposits are best used. It involves directing of funds to reliable economic subjects, and financial monitoring of the best investments projects. Economic subjects demand a perfected financial market and expect the availability of financial capital for implementing their investments.

2.2.9. Technological readiness

Ninth area – technological readiness: Economies adopt various kinds of advanced technologies, which bring progress in expanding knowledge and use of information. Information and communication technologies have defined a so-called general technology need, and their everyday usage is a key to determining the economic assessment and current state of technological readiness. It is necessary to create such assumption which would allow access to all the advanced technologies in the world, because using technology within the boundaries of individual state effects competitiveness almost insignificantly.

10 Ujedinjene nacije; Izvještaj o svjetskoj društvenoj situaciji (2006), Preuzeto: Ekonomski razvoj; Šahinpašić; Sarajevo
2.2.10. Market size

Tenth area – market size: Economic subjects have an advantage on big markets because bigger markets ensure bigger trade, which influences the economical growth of an economy.

2.2.11. Business perfecting

Eleventh area – business perfecting: The quality of the overall business connections is closely linked to business perfecting, where the quality of work and different strategies are associated with modern business processes.

2.2.12. Innovations

Twelfth area – innovations: Economic subject in developed countries have the need to design and develop special products and process models, which will preserve competitive advantage in the market of goods and services. Developing countries can develop competitiveness in terms of national competitiveness by adapting of their existing technologies. For innovation development it is necessary to create an environment for faster research and investment, higher and constant cooperation between science and industry, a large degree of protecting intellectual property and supporting private research institutions.

CONCLUSION

Leader of future economic growth and development of the society will be superbly educated and trained highly specialized elite businessmen and politicians, who will have enough talent, individual freedom, to realize the full freedom of the market, increase the wealth of nations, and invest in the development of the economy. The development of the society to the maximum extent will depend on education, health and safety. The impact of intellectual capital is associated entirely with the level of economic development; and investment in education enables economic growth and a better life; increase joint and personal wealth, to invest in education, which in the end results in higher productivity. Empowering knowledge society leads us to the strategic characteristics of the resulting understanding of the state that has the obligation to continuous investment in education and supporting research projects. Knowledge management will in this way close interconnections between management, mathematics, economics, psychology and sociology, which will ultimately result in competitive advantage of companies, regions and states.

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THE MACRO ELEMENTS’ CRITERIA EFFECTS ON TAX INCOMES AND THIS FACT’S ANALYZES IN DEVELOPING COUNTRIES
A. NIYAZI ÖZKER

ABSTRACT
In this study, we attempt to determination some financial components’ criteria effects aimed at developing countries’ tax incomes level as OECD countries that are have important location in order to be established on OECD’s own responsibility. Tax income level is not important in developing countries, but is the serious matter that should be deal with to catch the desired economic levels. And also this financial problem, as a phenomenon in some time, connected with the other related to countries’ financial components that have the diagnostic financial balances have integration problem in international economic association. It is appear that tax burden, foreign trade capacity, corporation tax levels or levels of debt amount and current balances to GDP etc. macro values have an remarkable impressions on the developing countries’ tax income levels. The econometric panel data analyzes’ finding results are meaningful explaining the effect of these macro components that have emphasize on economic growth and it is observed that if any country is in the deviation process related to these fiscal and macroeconomic component levels, the tax level of this country is the matter that not get in the same process.

KEYWORDS: Tax Incomes, Current Deficits, Foreign Trade Balances, Debt Capacity. Payment Balances.


1. INTRODUCTION
Macro elements that have an important role on national tax incomes come into being with some financial and economics items, which have criteria effect in order to determine and interpret operations connected with tax burden. On the other hand, the financial phenomenon in touch with tax burden especially appear in to constitute development programs aimed at structural reformist changes that sense the relationship between political expectations that take shape by way of globalization process and attitude toward tax compliances developing countries. Developing countries in the scope of OECD-Organization for Economic Co-operation and Development are being given as meaningful examples, which resemble as financial matters related to their structural complex in each other. Certainly, the primary macro components, before all else, that have sensitivity effects on the national tax incomes are “Corporation Tax”, “Current Account Balances”, “National Debt Limits to GDP”, “National Trade Balances” and “Tax Burden” etc. like macro worthies and their structural contents. Therefore, even if developing country’s, for example, national trade balances and trade capacity go well, but the other macro values like current account balances or national debt burden to GDP connected with national tax burden have gone on insufficient levels, this country’s national tax incomes will come into being negative levels in being inevitable deviations.

In addition to those developing countries’ tax burdens and probably payment balances constitute the different criteria effects in spite of those countries’ the associated financial matters and objectivities. As OECD countries developing countries’ the most financial point under consideration attain not the desired tax incomes that led up to budget deficits together with the other economic balance problems and also, voluntary tax compliance behaviors that cause remarkable tax revenues loss are not strong. Moreover, usually corporation tax applications and financial operation in touch with the tax attitudes are influenced by of decision making process due to the owner of financial capital and investments’ put pressure on the considered political strategic approaches. It is appear that the declines connected with tax revenues fact should be deal with through in the direction of meaningful analyses that comprise balance worthies as soon as the aimed financial worthies and OECD countries’ associated financial balance objectivities following two methodical approaches and regressive models. First of all, those economic and financial components’ structural relationship and their effect levels by the way of qualitative thematic analyses have to be bring up and then secondly, it should be tray to be understood via meaningful regressive models strengthening remarkable datum in the probable panel regressive framework.
2. MACRO COMPONENTS’ RELATIONSHIP AND THEIR STRUCTURAL LOCATIONS IN TAX REVENUES PROCESS

Tax revenues fact is in relationship together with the other macro elements as being inevitable structural formations that have directly effective level, which shape financial policies. This financial phenomenon, as structural location, cover the tax control elements including all the taxes’ special attributes and their application relating to law and all the probable financial components’ their priority own emplacing. On the other hand, that means the finance policies framework received from maintaining and achieving a high level tax compliance in the tax control and financial obligation process operating in a complex interaction with each other. Therefore, it is possible say that there is a strategic behavior completed between taxpayers and authorities develops aimed at tax control framework in touch with public decision making process that also including financial analysis.

2.1. Tax Control Components’ Impression Process on Tax Revenues’ Analysis

As all the countries the priority objective is that have to able to reach the aimed tax incomes and this fact, as tax control process, suggest also to explore the specific tax policies that consider the attitudes tax compliance bring up tax control process including institutionally communications, governance policy risks, monitoring financial applications connected with tax types being located. Hence, tax control process is directly states the extended structural responsive to the enforced tax carrying out into the financial practices because of the control process components have more positive criteria effects to macro elements’ analysis towards taxation. Figure 1 express relationship tax control process connected with tax incomes and the concerned financial features directed towards the meaningful analysis that is follows:

Figure 1. Tax Control Framework and Its Components

As seen on figure 1, macro components process that has directly effect on tax revenues is a sensitive financial topic because of this criterion analysis process has potentially negative consequences that directly effect on tax incomes due to deviation from the intended tax revenues via the fiscal policies in the current period. Therefore, only the tax control components may not sufficient for realistic analysis because of the deficiency some macro current account worthies like payments account balances and total debt worthies to GDP. And also country’s trade capacity and trade incomes’ level are important financial items that each one is remarkable tax source. In the short, the strong tax governance relation to tax control process and its realistic meaningful analysis can be stated as the clearly defined communication strategy, which communicates the approach to managing all the tax worthies including the probably financial deviations’ criteria in order to have control over the transparency tax control process. And also, the depth understanding of where the key risks lie within the tax revenues process, such as - indirect or direct- capital and expenditure taxes, with effective controls in place to mitigate identified risks that are being matter inclined towards tax revenues analyses.

8 PwC-PricewaterhuseCoopers, Tax Control Framework, http://www.pwc.co.uk/tax/the-tax-control-framework. jhtml (accessed 07.07.2014.).
The integration of tax control components that resulted from the removal of macro units in public finance process may produce significant changes having effects on analyses, and this financial phenomenon can result in the net debt-income ratio of financial and nonfinancial sectors bring up “Debts to GDP” that is meaningful component as an important diagnostic element. In addition, the lack of tax integration connected with tax revenue determination means that institutional tax collecting is not the aimed level due to being insufficient, which effect on tax revenues analysis as the other macro component. Moreover, tax collection capacity can tend to decline so that macro conditions increase tax burden in sectors’ financial obligations connected with production costs, which is the main reason of empirical analyses’ declines. Therefore, tax control process should be inserted in the tax revenues’ realization process as a component including financial criterion effects, and furthermore their causal impacts on domestic politics have to be supported via regressive structural relationship that bring forth an important criterion effect on tax limits’ evaluations.

2.2. The Regressive Structural Process on the Tax Revenues’ Analysis

Tax revenues collection process contain both institutions’ interactive relationships meaning give a concrete example of the collected tax worthies and these financial items must be subject in analyses process to suggest the courses of financial actions aimed at the realized publically decision making process. This structural approach state the standard deviations in touch with financial crises through standardized financial objectives by percentage changes in macro components like interest rates and foreign currency reserves that have directly meaningful effect levels on the tax revenues limits. But, before else, if macroeconomic conditions’ structural appearance, as institutionally putting into practice, bring up the reduced tax revenues, the declines’ criteria effects should be concerned in the scope of uncongenially between macro components and financial policies. Moreover, the increased Debt to GDP and PSBR to GDP come on the scene being financial deviation components due to this phenomenon includes external financial data’s identify opportunities for new financial policies improvement as well as internal formation meaningful structural analyses in the regressive model framework. Therefore, a tax revenues analysis is the inevitable part of organizing structural performances earning from empirical evidence and an experimental process of implementation as critical for easing tax analyses that deals mainly with financial options putting into practice to the improved public sector performance.

Figure 2. State the tax circumstances’ of financial management and debt ratios’ locations in touch with the financial income effects.

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12 Aidt, pp. F637-F638.
14 Aidt, pp. 662 and p. 629.
15 PSBR – Public Sector Borrowing Requirement

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**Global Financial Crises**
- Eurozone Debt Crises
- Volatile Aid Flows
- Falling Commodity Prices
- Reduced Real Tax Revenues
- Increased Debt to GDP and PSBR to GDP
- Uncongeniality between Macro and Financial Policies

**Reduced Country Tax Collection Capacity and Revising Fiscal Policies**
- Deviations in Tax Revenues
- Declines’ Criteria Effects and Their Analyzes
- Formations in touch with Financial Policies

**Increased Dependence on International Loans and Macro Conditions’ Preparing Effects**

**Low Tax on Profits Remain Unaffected and Increased Current Account Unbalances**

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**Raising Country Debts and Debt Burdens’ Financial Income Effects**

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Figure 2 state macro structural components connected with tax revenues in the institutionally extension applications to the relationship effects. In contrast, it is possible that tax revenues’ probably effects on financial balances will be in the difficult analysis process in order to evaluation criteria effects and this process in touch with financial macro worthies come to the scene in the different belonging to each country. Therefore, as seen on figure 2 structural analyses’ criteria effects correspond to the view that high-value added by innovative institutionally policies in order to avail knowledge-related spillovers from the diversity of structural application responsibility. In addition, this regressive fact is that the variation thought the agency of fiscal instrument conflicts leads to persistent cross-sectional differences in the currency structural formations. Therefore, trade deficits’ deviation effects and the refinancing costs of financial unbalances can be insistently accepted within the main reasons in order to shed light on tax revenues’ regressive relationships. Deviation criteria connected with loan policy conditions and the increased current account unbalances have effects that are more remarkable especially in developing countries, but these same financial facts can be respected the main reason for formation global financial crises as a quick-witted element for developed countries.

In this respect, the probably global financial crises that come into being by way of financial regressive components creature more effectively financial impact within less developed countries due to the real debt burden and current account imbalances are in the lack of amicableness and conflict with macro conditions’ preparing financial concept as stated on figure 2. On the other hand, it should take into consideration liquidity limits as stable funding ratios or liquidity coverage ratios because of structural specifically limits on financial exposure with the other balance measures have to be considered having important role in the regressive analyses that sense meaningful through tax components. In this respect, panel data setting formations inclined towards structural tax revenues analyses have to bring up together with multi-aspect lines or multi-line of thought and look at the main objectives of tax revenue analyses. And in this point, some of OECD’ countries that take up in the scope of developing countries can be seem real to the analyses of tax income process taking as a good example group in our panel data approaches and also the empirical results verify our structural approaches.

3. AN EMPIRICAL APPROACH TO TAX REVENUES’ FORMATION IN TOUCH WITH MACRO COMPONENTS

Empirical approach in an the point of econometric view to tax revenues’ formation express to find linear relationship between variables spring linearly depends on displacement of tax revenues. The observed variables to determine linear combination is seem that the empirical econometric analyses can put forth meaningful results. The basic components of probability we need for the panel data analyses because of the developing countries in OECD group have the difference structural financial criteria effects. Moreover, we prefer this econometric approach due to catch empiric results that come on the scene as effectively three-dimensional ground in each other and each country can constitute their own difference effects on the other countries’ financial macro worthies. Therefore, we define the expected values that generalize the directed computation numerical techniques including experimental error, but the panel data analyses have are gone on the underlying relationship may not be exactly linear. This general problem directed towards tax revenues’ formations is to establish the combinations of specified macro components with criteria effects and the probably results will be able to interpret through containing additives’ criteria effects. On the other hand, the chosen model should bring to a conclusion the analytic interpretation of macro components.

3.1. Empirical Model and Its Components

We start by describing our empirical model versions bring up its objectives and structural component being subjects from 2003 and 2012 in model. The priority aim in the scope of our model is that put to a test directed towards the model’s macro component proving straightness and its meaningful criteria effects. The tax incomes analyses in touch with the revenues’ formations can be considered in panel data analyses as invariable time overlaid option model. The patter line system inclined towards tax revenues, as a panel option model, have been tested in the scope of the method of least
squares and the expected finds linear relationships variables that come to mean operationally analytic procedure to best fit line to data was accepted aimed at empirical analyses from 2003 to 2012. After 2003, developing countries that have GDP being under the remarkable national income - or less developed- in OECD group can point to be good examples of countries groups directed towards our panel data analyses. Especially, we keep in mind considering some countries that are Estonia, Czech Republic, Greece, Mexico, Chile, Slovenia, Spain, Hungarian and Turkey as developing countries in OECD group due to they have the approximately developing levels. Of course, it is possible to find some financial macro non-identical components within these countries, but this empirical matter is tried to overcome attempting to deal with including puppet or marionette variables, “ui”, in our model. But unfortunately, the concerned contribution to tax revenues formation or determine tax incomes limits make not perfectly possible for ensuring linear relationships aimed at the structural deal main with tax revenues’ statement due to being present the other macro components that can not insert in empirical model approach:

\[ Y_{it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \ldots + \beta_k X_{kit} + u_{it} \]  

\( i = 1, \ldots, N; \ t = 1, \ldots, T \)

Equality (1) states the generalized panel data analysis with “\( \beta_i \)” value that is situated as constant value in model and “\( \beta_i X_{it} \)” relationship exposure in each other to definite independent autocorrelation in the relevant interval period. All “\( \beta_i X_{it} \)” data relationships are meaningful in worthies that express “\( i = 1, \ldots, N; \ t = 1, \ldots, T \)” interval equality values. Functional panel analyses relation to “\( \beta_i X_{it} \)” can constitute as “\( \beta_i X_{it} \)” total parameters vectors that evaluate according to time. Both constant and gradient parametric units take shape as constant values according to time in our models and we suppose that the average zero and constant variances are being scattered independently in normal disintegration within identical units. Therefore, we can wright again “Equality 1”, in short, as seen on the follow line:

\[ Y_{it} = \beta_0 + \sum_{k=1}^{K} \beta_{kit} X_{kit} + u_{it} \]

\( i = 1, \ldots, N; \ t = 1, \ldots, T \)

Equality (2) is the total “\( \beta_i X_{it} \)” values with constant value that constitute criteria values connected with tax revenues limits’ formations in framework macro components. We include and replace the concerned macro components in our autoregressive model aimed at the variable models with constant parametric values. In this point, our objective is to be the formation with coefficients, “\( \beta_i \)”, in order to establish the criteria effects on tax revenues being the proportion of GDP. We take into consideration the meaningful value of “\( R^2 \)” that our criteria effect limits’ expressive the suitable and straight of macro components included. In the light of equality (1) and equality (2) empirical approaches inclined towards the aimed autoregressive model, we can state and wright the concerned structural autoregressive model that is follow:

\[ Y_{TG} = \beta_0 + \beta_1 (\text{Trade Balances}_{it}) + \beta_2 (\text{Property & Services/GDP}_{it}) + \beta_3 (\text{Incomes & Gains Taxes/GDP}_{it}) + \beta_4 (\text{Corporation Tax/GDP}_{it}) + \beta_5 (\text{Money & Payment Balances/GDP}_{it}) + \beta_6 (\text{Central Government Debts/GDP}_{it}) + u_{it} \]

Equality (3) express macro components’ criteria effects on tax revenues’ limited as the defined related to GDP. The most startling finding of the literature on factor income taxation is that the optimal tax revenues with macro components to government financial options and also, it has been shown to hold in cases with steady state, endogenous growth as well. Trade balances in our model are take into consideration as “monetary worthies, $” connected with real alteration worthies that the aim in this approach is to formation real index stimulation. The other macro components are considered being the proportion of GDP because of the needed financial macro values have to be added to our model as real macro options in 2003 and 2012 period. In addition, GDP worthies according to its own standard have been received as basic principle “U.S. Dollar, $” in order to ensure a financial worthies equivalences through macro components in model. However, Olivera-Tanzi effects relation to “Income & Gain Taxes” and “Corporation Taxes” have been paid insufficient attention to calculate criteria effects in the model.
Table 1. The Wald Test for Groupwise Heteroskedasticity in the Model of Constant Effects

Table 1 presents \( H_0 \) hypothesis’ conclusion remarks that are constituted as \( \sigma_i^2 = \sigma^2 \) and according to conclusions in table 1, \( H_0 \) hypothesis have to be rejected. Moreover, it is possible to find \( \chi^2 \) valuable being “9” the lack of restriction grade. This means that the concerned variance valuables change in respect of the units \( \sigma_i^2 \neq \sigma^2 \). Therefore, there is being heteroskedasticity as to the units connected with macro components. The conclusions that are under considerations were gotten via the Wald Test and all the macro components belonging to the concerned countries that are in OECD group were included in the Wald Test for heteroskedasticity as panel datum.

3.2. Empirical Findings and Results

In the light of our model, the determined empirical findings are meaningful and the generalized estimation equality’s large block mean was being matter for empirical findings inclined towards our model. Moreover, iteration number -or unit in a numerical series-, criterion parametric and number of observes -except for Pearson statistical values and its being diffused- put forth the empirical meaningful findings for consideration. Afterwards, especially the statistical probability of “\( F \)” test and “\( t \)” test was preferred in the coefficients’ tables. Findings’ meaningful seem to be in the different criterion valuables, but it is not possible to find equivalent criteria valuables on macro components’ disintegration criteria effects. We concerned empirical approach that is being stated through coefficients tables is different than the method of least squares that are being into dry dock.

Table 2. Macro Components’ Auto Regressive Criteria Effects on Tax Revenues (VG)

It is appear that the confidence interval is 95 % as seen on table 2 or through 0.005 error margins. The confidence coefficient is meaningful and its criterion effectively on determining R-squared. Also, \( P > |t| \) and \( \text{Prob} > F \) were included in the coefficients table calculating through the same period and the lack of restriction grade “\( t \)” value is “43.13” as “\( NT-K = 83 \)”. Therefore, the shadow variable is meaningful due to “\( \text{Prob} < 0.05 \)” that this empirical fact mean the macro components have a meaningful effects on the formational determined limits of tax revenues. The parametric present the flexibility valuables because of the model are logarithmic. If tax revenues of the concerned countries increase 1 %, trade balances only increase 0.040 % and tax burden limits increase more than total real tax revenues according to tax revenues in being linear forming. Hence, it is

possible to say that if the tax revenues (TRV) increase 1%, the tax burden of countries considered increase over 1% as 1.17%. Corporation taxes (taxcorp) and current account balances’ limits have been effected being negative values that mean shrink in the scope of financial options. On the other hand, if the tax revenues in the concerned countries (TRV) increase 1%, the corporation tax valuables decrease as “-0.15” and current account balances decrease as “-0.107”. The lack of restriction grade “F” table value is “0.566” or “prob < 0.05” that mean the meaningful of straightness rank.

Our model’s variable valuable that express “X”, is no-strong variable and it is independent from error terms as synchronic. The error terms have not autocorrelations and the error terms are homoscedastic and also the unit or time effects are not under consideration. Therefore, macro components’ criteria effects on tax revenues that have gone on the concerned period can consider the primary discrimination approaches aimed at our analyses’ versatile (many-sided) because of the discrimination error terms (Δui) are not in autocorrelation location. Moreover, (Δui) has the identically independent disintegration, which is the normal random variable. However, the primary discrimination approaches relation to our analyses can put forth directed towards aiming to observe the other macro components’ criteria effects in all the framework of approaches.

### Table 3. Primary Discriminations Directed Towards Auto Regressive Criteria Effects on Tax Revenues (VG)

Table 3 brings up the macro components’ different criteria effects in touch with tax revenues limits. In according to the determined coefficient values as criteria affect that the tax revenues have been affected by the independent variables meaning trough the different reciprocal influences. But, “Trade Balances”, “Corporation Taxes” and “Account Balances” are not meaningful to make a statement for macro components’ criteria effects on tax revenues. Therefore, table 2 is more meaningful than this table 3 because of coefficient values put forth for consideration negative meaningful criteria additives. However, the primary discriminations maybe more some analyses, but this approach produces more less standard errors aimed at our study and “t” statistical table values are more meaningless for expressing tax revenues’ being influenced by independent variables. In the other words, the error interval’s circumstances are wider than before. In addition, R-squared value decreased in contrast to the previous R-squared as 0.7691 meaningful grades. In short, periodical lags express not remarkable meaningful and these lags that are the subject under discussion of the primary discriminations are unnecessary through analyses in touch with tax revenues formations as the dependent variable in our model.

**CONCLUSION**

Macro components being independent variables have important criteria effects on tax revenues constructing the aimed tax limits. This process appears via both structural tax formations and the other macro financial valuables-balances that are “Trade Balances”, “Property and Services Trade / GDP”, “Corporation Tax”, “Account Balances”, “Income and Gain Taxes / GDP” and “Central Government Debts / GDP” as the priority macro independent variables connected with empirical analyses. From a practical perspective, implications of these findings support a responsive regulation approach and especially these macro components have important criteria effects on the desired tax limits in developing countries. Therefore, it is possible to indicate two main points pertaining to the formation of this financial fact. First, tax authorities in the decision making process may use different methods and strategies to enhance tax compliance and its structure responding to the concerned macro variables that come into being via their political preferences. In this rank, the structural tax process bring up the increased dependence on international loans and macro conditions’
preparing effects inclined towards responding to trade deficits' deviation effects on loan policy conditions. This point of the view, in the same way, state a structural tax alterations and reformative process turned towards the purpose tax revenues' limits. Secondly, the macro components of tax revenues have to suitably realized, and then these variables under considerations with additively criteria have to be held through financial macro analyses aimed at tax revenues’ different understood the spite of these components different effectively values.

As especially developing countries, it is appear that these two approaches referred to the concerned financial facts cannot separate in each other as both the structural alteration process inclined towards financial reforms and the empirical analyses producing macroeconomic components’ criteria effects. A closer look at the role played by financial economies as determinants of structural relationships’ levels have to be concerned volatile financial flows through falling commodity prices that constitute financial income effects. This fact is more meaningful for tax revenues’ components due to express debt burdens’ increasing in touch with tax collection capacity and revising fiscal policies aimed at the analyses in the present macro conditions. However, also the parametric measures confirm to come into being the tax burden and tax collection capacity are in the linear formations that have a financial content in each other, and also especially “Tax Burden”, “Trade Balances” and “Trade Volume” have meaningful effects on the tax revenues as macro components, which have criteria effects. Therefore, although the macro components’ having differences these being of talked of components attempt to put forth the diagnostic features for consideration to designate the tax incomes limits. To deal with this phenomenon related to the desired financial balances’ formations devote to the correctly suitable financial policies that take into consideration the public budget balances to the future as well as the macro policies including the financial characteristics that have criteria effects on the public revenues.

LITERATURE


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PERSONAL BRANDING IN THE CONTEXT OF CONTEMPORARY MARKET
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ABSTRACT
Mass economy was based on production directed towards anonymous customers whose interests were pretty easily designed. The process of interest forcing, i.e. needs, are made more easily by mass media. The expansion of mass media which happened about 60 years ago redesigned marketing or better to say promotional activities. Systematic brand articulation and all the other immaterial resources like image or goodwill begin. The branding process stimulates technological development which enables new business philosophy development. New problem related to different employees treatment arises. More and more employees are becoming significant organizational resource. Workforce as a “trained on the job” element of business that is easily available and substitutable is gradually ceasing. Innovation, new products, brands, loyalty, quality, speed, flexibility and team work are becoming basic elements of contemporary market activity. The analysis will be based on good business practice questioning and relevant empirical research and in the process new economical principles will be studied through theoretical analysis.

Within the business context human resources are becoming key element of profitability in which finance and technology are transformed in the supporting elements. Human resources, creative people and experts, i.e. talented individuals in particular, are becoming aware that they are owners of the most valuable organizational resource- knowledge i.e. creativity. In the process, contemporary technology, like the Internet, enable complete affirmation of personal potential. Assumption of personal branding is being developed and with its help creative individuals articulate their own, individual image while offering their potentials on the market. Lifelong loyalty is becoming past while workforce mobility is constantly strengthening. Creative individuals need to become completely aware of their potentials and they need to insist on their own advantages while engaging within business organization. The trend is framed within the contemporary concept of production for known buyer. Aware creative individuals as workforce are becoming not only equal but dominant in relation to employers in the process of employment negotiation. They are premium brand which requires attractive working conditions and quality working relations in order to completely present their excellence. Branded individuals are aware that generating new added value depends on them in large amount. Mentioned processes are important for creative industry, fun industry, high technology industry and all production and service processes which are based on innovation and creativity. Imaginativeness, intuition and social networking cannot surpass informational technologies i.e. artificial intelligence which needs to be used as complementary segment of human engagement. Knowledge basis and data mining is in the first place used by experts for creating new ideas or general designs and visual solution. Branded workforce which is aware and competent requires sophisticated managing which acknowledges the complexity of a human and articulates completely new organizational relations based on networking and open communication channels. Personal branding as a process of value articulating which the individual offers to employer or to potential business partners will become standard element, not only for personal business positioning, but for corporative strategies of human resources management.

KEY WORDS: Branding, Creative person, Innovation, Personal brand, Social network.

1. INTRODUCTION
In the coming period, the role of human resources will continuously increase. Creativity becomes a fundamental feature of almost all economic activities. Creative and talented individuals will use increasingly sophisticated technologies and will focus on narrow market segments and individuals. Therefore, in the text attention is paid to creative people, i.e. branding of creative individuals and experts. We will briefly show the genesis of market relations and communication technologies which are crucial for articulation, respectively for affirmation of the brand. We will analyze fundamental elements of the branding process that fits into the context of intangible resource domination within the modern economic systems.

Branding is primarily a communication process that is correlated with technology, market relations, corporate business strategy and interests, i.e. value system of the consumer population. It is a dynamic phenomenon which is submissive to evolutionary and revolutionary modifications. Revolutionizing of a branding system is generated primarily by techniques
which can, due to radical innovation, in a very short time transform and take on new forms and new qualities. Technology or rather technical devices are creating social systems within which communication is a connective tissue. For example, the invention of the printing press by Johannes Gutenberg in the 15th century completely changed the economics of printing and book publishing, transforming print media in the dominant form of not only knowledge transfer but also general communication. The first forms of promotion appear in print media, which grow into mass media where at the same time the process of articulation of mass industry takes place.

Procter & Gamble (P & G) is one of the first corporations that began with the planned promotion and affirmation of the brand Ivory Soap in the 80s of the 19th century. Nowadays, corporation P & G is the largest advertiser in the world having its portfolio 23 brands whose annual sales value exceeds one billion USD (Champniss, Villa, 2011, p 7).

Rapid expansion of newspapers and magazines was a stimulator for the development of activities of promotion and advertising. Promotion was in its initial stages focused on an anonymous mass of consumers because at that time consumer profiling techniques did not exist. Moreover, national markets were just created through the development of transport infrastructure, primarily the rail network. Because of its speed and transport capacities, rail systems create a new geography since cities are becoming closer. Individual authors of that time called it “attenuation” of transport distances. (Schivelbusch, 2010, p. 46) The beginning of railway development is characterized by numerous accidents that sparked the development of a new technology known as the telegraph (Winston, 2000, p 23). Telegraph is communication technology for safety in railway traffic and also technology for the integration of the market and society as a whole. Next to the development of transport and communication, numerous technical innovations enabled the emergence of the first major business organizations which are able to place large quantities of products on the market. One of the constraining factors for rapid industrial development was low purchasing power because the middle class was just evolving.

Fordism and Taylorism are enabling a drastic increase of industrial worker productivity. One consequence of this process has been the increase of workers’ salaries. In a relatively short time the strengthening of purchasing power resulted with greater demand than supply. This is a key moment for the establishment of stable market relations in many industrialized countries that was occasionally interrupted by world wars and the Great Depression in the 30s of the last century.

In the early stages of mass economics and society development, branding was not so important. Also, the quality was not too important to managers which were focused on finance and technology, i.e. internal organizational relationships. Communication with the environment was minimal and relatively closed organizations with mechanical structures were dominant.

In the initial stages development of mass media, i.e. television and radio, was accompanied with the expansion of printed publications, primarily newspapers. In the mid 20th century the process of business philosophy redesigning starts, which resulted with the affirmation of human resources, teamwork, quality and design. At the same time, mass media enables new forms of promotional activities and stimulates globalization processes which are primarily implemented with the help of the television and film industry.

Radio and television enable the global dispersion of corporate marketing which at times has manipulative characteristics (Barker, 2002, p 52). Some authors write about American media imperialism which imposes a specific set of values. Promotional activities are conducted not only in national markets but also take on international character which implies the articulation of global interests and lifestyles. American lifestyle that is based on individualism and entrepreneurship is imposed as dominant, where some iconic products are affirmed such as Coca Cola, Levi’s and McDonald’s. These are some global brands that are the result of marketing department actions.

Marketing processes of the 60s and 70s are carried out within organizational units that are not too connected with other business functions such as research and development, production and finance. During market research and analysis of consumer interests, marketers do not cooperate with other experts within the company. These practices were carried out during new product developments when the final word had technical experts who were primarily focused on the functionality and durability of new products. More widespread use of television and radio had influence on the reshaping of promotional practices. Visual and acoustic messages have proven to be an effective tool of positioning of certain products and services, i.e. brands in consumer awareness. Television and radio have contributed to the creation of a mass society in which buyers, respective consumers were anonymous individuals. These are primarily one-way communication channels. In the terms of marketing they are primarily used for the imposition of certain products and services.
2. RADICAL TWIST

Technical inventions such as robots, transistors or computers enable entirely new forms of production. Also, managerial philosophies which focus on customers, employees and the articulation of new organizational architectures similar to organic structures contribute to that.

Affirmation of the Internet and multimedia creates a completely new communication infrastructure across all subsystems of the social entity. One of the major features of the Internet is its bi-directionality which enabled the formation of social networks, branding and communication, i.e. dispersion of knowledge and experiences.

Guided by computers, timely production, teamwork and project management have created conditions for personalized production in almost every industry. Personalized production, i.e. production for a known buyer implies precise knowledge of consumer habits and interests. Therefore, the marketing analyses of narrow market segments are conducted and enormous databases provide insight into the habits and needs of consumers on an individual level. Mass society, i.e. mass economy rapidly “overflows” giving way to personalized production that is characterized by networking, flexibility, creativity and speed.

3. NEW PRODUCTION RELATIONS

New communication processes and new organizational forms, as well as new technologies have initiated transformation not only at the level of business organizations, but also at the level of the economic system as a whole. Knowledge economy was created – the new economy which is dominated by nonmaterial resources. Knowledge and innovation are imposed as key factors in the generation of added value. Profitability is based on experts and professionals of different profiles, not only in creative industries.

In this environment a holistic approach is necessary with the help of critical, strategic and lateral reflection in order to ensure competitiveness in a dynamic and global market (Gallardo. 2013, p 188-189). Together with the help of multi-functional teams branding is being conducted. Creativity becomes an essential element for the functioning of promotion, research and development, as well as every other business function. Managers at leading corporations are becoming aware that only creative people who are properly motivated can ensure high profit rates required for corporate development.

Employees are no longer imperfect and easily replaceable extensions of the machine. Employers are beginning to treat them as persons who can only be motivated with highly sophisticated methods, not as before only with money. In these new circumstances, employees and consumers become persons with names and surnames that managers are trying to integrate in the manufacturing processes, already in the planning stages of new product and services development.

Until recently, consumers and employees market position was ensured mainly by legal regulations or various forms of union pressure. Today, the dispersion of power is visible within the business organization that enabled the strengthening of (negotiated) market position of employees and consumers. Globalization and hyper-competition have caused the need for constant innovation, i.e. the necessity of permanent placement of new products and services. This is a complex process whose risk should be minimized and that is not possible without the active participation of consumers and employees.

4. PERSONAL BRANDING

Employees need to continuously and consciously work on the improvement of their strengths and at the same time eliminating their weaknesses. This is a continuous process of lifelong learning, which can be implemented by employers, as well as employees themselves. We believe that nowadays it is necessary to systematically affirm your own identity, i.e. to brand your personality in order to conduct negotiations with managers on an equal footing. Modern employees, primarily creative ones, owners of creativity, imagination, knowledge and entrepreneurial spirit are today’s key resources / elements to achieve sustainable competitiveness on the global market scene.

During the process of personal branding it is desirable to use different cognitions from the marketing field and different social science disciplines. Also, modern communication tools should be used such as technical support for numerous social networks, forums and other forms of communication. Internet business, i.e. digital business has become an integral part of business strategy for most companies that operate in markets of developed countries. Digital networking has enabled global action and transparency of companies and thereby the possibility of manipulation was reduced, but still should not be completely ignored.
New business philosophy is being formed and it is focused on customers and employees. Business philosophy, which emphasizes the affirmation of working relationships and has an inspiring affection for the creative process. Holistic approaches and organic structures stimulate flexibility, networking, project approach, learning and cooperation. They are used to achieve higher quality, attractive design and competitive prices of various products primarily, but not exclusively, in the area of high technology and the creative industry. Individual specificity, i.e. unique individuality, is acknowledged and recognized within the new business paradigm. Every individual is unique, not stereotyped and not generalized like traditional managerial concepts had imposed. Creativity, respectively source of new added value in the modern economy, requires a specific approach exempt from classical clichés that were functional in former market relations. Sustainable competitive advantage must, above all, ensure innovative work that needs to be motivated in a planned and organized way.

4.1. Personal branding elements

Personal brand or personality is a characteristic of all creative individuals, where only in conditions of appropriate managerial approach, appropriate technical support and work environment can be fully expressed. Classical managerial patterns did not care about it because they make presumptions that individuals are not interested in – the active involvement of the work process and self-affirmation in the realization of assignments. Today, managerial practices, particularly in the area of high technology and creative industries are based on assumptions of understanding the employees. Managerial practice must be focused on the identification of employee’s interests, talents, social contacts, knowledge and skills. Personal specifics have to be taken into account and systematically developed. Former practices when the personalities were equalized and workforce was transformed into an amorphous mass should be abandoned. With this amorphous mass it was easy to manipulate, primarily with the help of material rewarding, external systems of control and punishments.

For instance, personal branding in the film industry, fashion industry, entertainment industry such as music production has a relatively long tradition. Actor Paul Newman has successfully built his brand and earned several millions of dollars which he donated for educational projects and towards charitable programs. Also, top model Cindy Crawford successfully built her own brand (Keller, 2003, p 4). Personal brand is articulated through various media resources such are books, magazines, television or websites.

Celebrities are famous people who consciously build their own brand, where they often hire a managerial promotional team who take care of the affirmation of the celebrity’s brand, celebrity’s protection and constantly increase value of them as a brand. Some of today’s most popular celebrities are, for example, David Beckham, Jennifer Aniston, Brad Pitt, Kate Moss and Naomi Campbell (Green Wood, 2013, p 74). Often the case in Croatia is that some celebrities are famous for a very short time, because their brand is not the result of designed branding of strong individual characteristics.

In our opinion, personal branding is a task for creative people, i.e. talented individuals in the world of labor. They are the owners of knowledge, expert cognition, intuition, imagination and creative or innovative skills which are crucial for the creation of new added value. These personal characteristics allow for a strong negotiating position in negotiations with employers. Personal benefits should be transformed into a recognizable brand that will affirm these individuals in the labor market. Lifetime employment in one company has become a matter of the past, and personal branding becomes a powerful tool for the realization of business mobility.

Creative people are key element of success in research and development, including new products. During employment negotiations with employers of certain companies they need to know the fundamental processes of the company. The fundamental corporate processes can be compatible with the fundamental values of the personal brand and in this case successful cooperation is possible. Then a creative person may impose their own conditions not only in the terms of salary, but also work conditions and the treatment of intellectual property rights that will be the result of his work.

Today, patents and various inventions are crucial factors for differentiation, i.e. for acquiring visibility on the global market which is characterized by higher supply than demand. Therefore, the affirmation of an attractive brand is one of the most important processes of articulating sustainable competitiveness not only for the company, but also for the creative individual or expert. In fact, brands are a form of communication that facilitates the orientation, i.e. selection and decisions on the market which is full of products and services from all around the world. For several decades, brands have become an increasingly important element of intellectual property.

The situation became complicated when the anti-patent movement occurred some 50 years ago when The General Assembly of the United Nations included in their resolution a controversial category of the common mankind heritage. This category included patents and other forms of intellectual property prescribing them as a type of general public good entered into a new international economic order, imposed primarily by developing countries. Some 20 years ago the anti-patent movement was revived when Brazil stopped complying with international patents for drugs intended for the treatment of AIDS.
Fifteen years ago, Naomi Klein wrote the bible about anti-branding titled No Logo. The author starts with the theses that in the mid-80's successful corporations were primarily producing brands and identity, not products (Klein, 2002, p 15). However, the fact that brands are primarily the result of systematic research and increased investment in development has been neglected. Applied science has become a first-class production power which has permanently improved products and services. Branding is only one of the processes which is based on creativity and knowledge i.e. non-material resources. The domination of non-material resources, does not exclude material compositions which consumers are beginning to experience in a new context. Within the new environment, speed, quality, design, accessibility and originality are becoming as important as material performance. These non-material compositions are synthesized by the brand, and in our opinion, that important fact on brands role or better expressed function is neglected by Naomi Klein.

Emotional attachment to today’s consumers and to a certain brand, i.e. products is undeniable and usually is not the result of promotional manipulation. Moreover, emotional attachment is a result of an intellectual property cluster that comprises copyrights, recognizable corporate / brand colors, design, marketing cognitions, databases, categories and archives (Jolly Ed., 2011, p 6). Intellectual property cluster enables the acquisition of consumer loyalty, without which it is almost impossible to achieve profitability on the global market.

Globalization imposes certain universal business rules and encourages the convergence of consumer interests. This creates global products such as Coca Cola or Adidas. However, at the same time the affirmation of local interests, habits and brands is enabled. Starbucks is a global brand, i.e. corporation which has given up on expansion on the Croatian market because the Croatian habits of drinking coffee do not correspond with business strategy and policies of the corporation.

Numerous Japanese corporations, i.e. brands were unknown 40 years ago. Economic development in certain countries in terms of globalization has enabled the affirmation of new global brands. For instance, Japanese Sony and Toyota have become the world’s prestigious brands but were secondary market actors on the global market scene in 70s of the last century.

The portfolio of brands in certain country indicates the level of national economy development. China more and more often appears as the seat of global brands such as Lenovo or Li Ning. This is the sign of the rapid Chinese economic development. Brands are market indicators for business success and important indicator of projections of future corporate incomes. In that way, they are orientation point for investment processes and that is of a great importance for the segment of high technology (biotechnology or nanotechnology) which are often characterized by high risk.

Branding of some countries has become accepted practice. Governments of many countries are trying to articulate a distinctive specificity in order to position themselves in the global public opinion of 200 countries. Some countries are branded for a very long time, for instance, Japan is known for its technology and diligence, Switzerland for watches and wealth, United States for entrepreneurship and civil freedoms. We can say that brands of these countries evolved into stereotypes. All responsible national governments seek to articulate more positive perception about their own country. It should be emphasized that branding of a country should be treated as a component of national policy and not as isolated (professional) process.

It is necessary to simultaneously and systematically implement branding as part of a national policy. Implementation is possible with the help of the following processes: tourism promotion, which includes visits of foreign tourists who are directly introduced with the mentality of the population, country’s natural beauties, gastronomy, culture and other segments of the community; exports of goods and services can affirm each country and foreign policy, i.e. with the implementation of various initiatives and actions; cultural events and various projects, public statements of celebrities from cultural, scientific or sport life (Clifton Ed., 2009, p 208).

It is obvious that the brand cannot be articulated only with marketing instruments. That is a common misconception of politicians who insist on the creation of short slogans such as “Malaysia-truly Asia” or visual symbols such as the sun of the famous painter Miró who represents Spain. Politicians should concentrate on monitoring, i.e. analysis of the country’s reputation in the international community. At the same time, cooperation with the business community and civil society should be developed with a strategy aimed at promotion of creativity, skills and entrepreneurial spirit. This will eventually result with the placement of original, high quality and competitive products and services. Generally, this effort is recognized on the international stage and initiates the establishment of a positive perception of a country.

Regions are also the subject of branding. For instance region of Tuscany is perceived as a quality of life region, Bavaria as an area of high technology and at the same time preserved tradition, Silicon Valley as a developed area of entrepreneurship and innovating efforts in the field of high technologies. In Croatia the region Međimurje is perceived as a developed region of entrepreneurship, but this perception does not have international character. Specific associations are linked with cities. Paris is perceived as city of sun and art, Milan as a center of high fashion, Rome as the eternal city and Rio de Janeiro is associated with carnival festivities. Some time ago the process of branding was initiated for our Adriatic towns. The process has not been finalized although it is evident that branding is not only a marketing tool, but an integrated process connected with many various elements.
4.2. The importance of personal branding

Every man in everyday life has several social roles such as the role of parent, employee, recreationist or political activist. We will elaborate in more detail personal branding of the workforce, respectively branding in the world of work.

Personal branding in the world of work implies a clear and precise determination of fundamental values. Person branded as a creative person must be aware of the importance of values such as learning, entrepreneurship, knowledge, innovation and team spirit. Raising awareness of fundamental values and transparency of these values is the basis for their improvement. That's why personal branding is not just a marketing value, but it is a process of individual improvement and self-actualization and they are the key components of the human essence.

Conclusion is that fundamental values of the brand and human essence match up, therefore branding is not only an instrument of articulation of personal recognition, but also a method for realization of individual's vision of own reason of being. In our case this is self-actualization and self-affirmation within a business career, which becomes more important for employment, primarily for employment of young people. Just a few decades ago, managers believed that the most important factor for employees’ motivation were financial rewards. Today the situation has changed.

Personal brand of creative persons includes imagination, intuition, passion and dreams as components of their innovativeness and scientific development. The affirmation of these personal characteristics should be continuous and credible. In this way, the commitment to the above mentioned individual characteristics is guaranteed. Self-awareness and self-affirmation is not a static condition, but a condition with a dynamic character which requires adjustment to the new situation, i.e. flexibility which allows continuous change. In other words, a creative person develops where learning and experience are guarantees for the effectiveness of the process. Experimenting in the process of individual development for creative persons is a common practice so rigid and strictly formalized structures are not a stimulating context for their actions. That's why creative person need to have the autonomy of action within a business organization. In this way, their potentials are demonstrated and materialized in new products and services or patents and other forms of intellectual property.

Personal branding process of a creative person must respect the mentioned processes, because they are fundamental components of a person's individuality, i.e. they are recognizable on the labor market. Also, creative persons have to be credible which is confirmed in everyday practical work. In that case personal brand guarantees real personal potential. In such circumstances, personal brand is not a manipulation instrument, i.e. a mere tool of public relations without the real content; it is not the PR spin.

Commitment is one of work engagement characteristics in business organization. It can be realized only with an adequate organizational value system. The culture of dispersion of knowledge and skills, and not strict individualism, favors the constructive work engagement of a creative person. Their branding includes the exchange of knowledge and skills, as well as features that create his entire identity.

The process of branding involves the conscious and the unconscious processes, but not only in the personal brand articulation, but the brand in general. In this context, the role of emotions should be observed, because they are very important in the formation and detection of values (Walvis, 2010, p 53). Positive emotions such as devotion, happiness, satisfaction, achievement and empathy provide psychological integrity of a creative person. At the same time, emotions are a stimulator for personal involvement, perseverance and absorption of profiled personal interests, which are important elements of personal brand. Managers recognized the meaning of emotions and they respect and systematically encourage them.

It is obvious that a personal brand represents a mental model which is an important part of a psychological personal integrity. A mental model and a personal brand enable effective communication with colleagues and employers and create the basis for successful human resources management. Thus stated personality i.e. communication in the workplace is contrary with the practice of mass industries where the employees were passive and did not showing their talents and abilities, because managers were not interested in them. Fragmented and automated manufacturing processes were not favorable for the expression of personality.

Creative persons and experts are aware of their talents and potentials that are crucial not only for their personal brand, but also for their development within some business organization. Their unique abilities are developed by learning and permanent analysis of the set objectives and organizational relationships. A strong desire for personal and organizational achievement is a characteristic for them because they are extraordinarily involved. Thereby, creative persons expect that their work is evaluated appropriately. Creative persons and experts are extremely motivated, among other things, because they believe in what they do.

Work engagement of creative persons and experts are supplemented with their flexibility, which is one of the specificities of personal brands of such type of employees. They continuously monitor and analyze structural changes
and modifications, as well as challenges that occur in the organizational environment. Strong personal brands have a generally very high level of flexibility. Flexibility is an extremely useful feature in terms of fierce competition and increasingly frequent radical innovation, not only in the economy, but also in other segments of society.

Personal branding is a complex process which requires a systematic approach that ultimately results with a reputation and a positive image of the creative individual. The mentioned status increases the interest of employers to hire these persons and they are often internationally affirmed. An attractive personal brand cannot be achieved without the formulation of individual vision, mission, strategy and short-term policies. It is about individual planning of an own business career and it is about manners of permanent scientific and professional training. Finally, personal planning and strengthening of competencies must enable the expression, i.e. materialization of creative potential.

The unique model of working environments and organizational relationships for maximum utilization of creative persons does not exist. Creative persons are unique and exceptional and they act in specific ways. These are general rules: elimination of hierarchy, openness of communication channels, informality, autonomy and ensuring the removal of repressive measures in a case of any failures, enabling smooth improvement and the freedom of expression on social networks.

Social networks like Twitter, Facebook and Linkedin are extremely useful communication channels for the affirmation of a personal brand. However, access to social networks is absolutely available, so networks can be misused. Companies need to take care about it with the help of designed strategies (Flynn, 2012, p 5). Creative persons must also take this into account, because their personal brand may be the subject of unsubstantiated attacks. Of course, a reversed process is possible which arguably affirms a personal brand.

Today, artificial intelligence can greatly contribute to the creation of new added value, but radical innovations will still be maintained as a result of imagination, intuition and creativity of talented individuals. Therefore, branded individuals will use computer technology as a powerful tool to update their creative potentials which includes the use of social networks and other forms of digital communication.

5. RESEARCH

Our goal was to research the current personal branding trends in Croatian market. For that purpose we have created a questionnaire with nine questions about familiarity and application of personal branding. The questionnaire was posted on internet, and link was sent per e-mail to business partners with the request to answer the questions and to forward the message to potential respondents (snowball sampling). We have received 410 answers.

The results show that 79% of respondents have included the personal branding concept in human resources strategy of their companies, and the same percentage of respondents (79%) check their employees on the internet.

All respondents who check their employees on the internet identified the web sites that they visit, and the results are shown in table 1.

Table 1. Answers to the question: “If your answer to previous question was „Yes“, please provide the information what web sites do you visit (possible to choose multiple answers)”
Next questions focused on job candidates, rather than existing employees. The percentage of companies that check their job candidates on the internet is also 79%, and the results of web sites that they visit is the same as in previous answers, that are shown in table 1. Also, 79% of respondents answered “yes” to the question “Have you ever decided to turn down the candidate because of information about him that you found on the internet?”. This shows the growing trend of checking employees and candidates on the internet, which is a phenomena that is not often discussed in public. The evaluation of the importance of personal branding in the career development is shown in table 2.

**Table 2.** Answers to the question: “With grades from 1 to 4, evaluate how much personal branding influences (positive or negative) on the career development.”

![Table 2](chart.png)

Other results show that almost 80% of respondents take care of their personal brand, which may indicate that individuals who are aware of the importance of their personal brand evaluate other individuals in the same way. Most of the respondents have their profile on Facebook and LinkedIn, but the number of Personal contacts, as one of the ways for creating one’s personal brand, also had significant number of answers.

### 6. CONCLUSION

Personal branding is becoming an increasingly important element in the modern market. Branded creative persons enable the generation of new added value in all areas of business. In the creation process of their own image they follow the processes and laws of branding which are used by experts during product, service or certain countries branding. Personal branding is always based on distinctive and above average talents. It is not surprising that the first examples of personal branding can be found in the field of film and music industry. In the last ten years, these processes can be noted in the business segment. The importance of talented and branded individuals in companies is not questionable - they are one of the main drivers in creation of competitive advantages. Characteristics of these individuals, their motivation, knowledge and personal development significantly affect the business. Apart from requiring a special organizational culture, open communication and space for personal development, they stimulate the business inside the organization, as well as on the market. For human resource managers development of personal branding allows easier identification of potential employees. If strategic intention aims at innovativeness, then such individuals are the only logical choice in the selection process. The creativity of these individuals becomes a pivotal component of current and future economic relations, which are today in the phase of fundamental transition.
LITERATURE

10. Schivelbusch, W., (2010), Povijest putovanja željeznicom, Naklada Ljevak d.o.o., Zagreb

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GLOBAL MACROECONOMETRIC APPROACH TO MODELLING UNEMPLOYMENT IN THE CSEE COUNTRIES

SASA JAKSIC

ABSTRACT
The paper models unemployment in the group of selected Central and Southeast European (CSEE) countries using a global macroeconometric framework to account for the dynamics in the labour markets of the neighbouring countries. Traditionally, being the largest labour market in the region, Germany attracts workers from the CSEE countries as it offers higher salaries and provides better working conditions in comparison to their home economies. To appropriately account for possible spillovers from the German economy and its labour market the global model employed in this paper includes Germany as the dominant economy. The results of the study indicate that the CSEE countries labour markets are highly influenced by the dynamics on the German labour market.

KEY WORDS: Global VAR, weak exogeneity, GFEVD, unemployment.

1. INTRODUCTION
On their way to crossing the path from a centrally planned to a market-oriented economy the CSEE countries still face similar challenges they faced twenty years ago. As the main challenges in the labour markets of the CSEE countries Garibaldi and Brixiova (1997) name difficulties in the process of job reallocation between public and private sector and closure or privatisation of state-owned firms. Consequently, this leads to low job destruction and construction rates. Almost twenty years later Vukšić (2014) as the main difficulty of the Croatian labour market identifies low job destruction and construction rates that arise mainly due to rigid legislation and inflexible labour market. Therefore, challenges detected twenty years ago are still present in the labour markets of the CSEE countries. Figure 1 displays the unemployment rate pattern in the selected set of CSEE countries and Germany along with their abbreviations used in the results section.

Figure 1. Unemployment rate
In the pre-crisis period unemployment rate in all of the CSEE countries (with exception of Romania and Hungary) exhibited decreasing trend. In the crisis period unemployment rate increased. However, while in some countries unemployment rate started to decrease (Czech Republic, Slovakia, Romania, Poland and Hungary) in Bulgaria, Croatia and Slovenia it continued to follow upward trend. It is interesting to note that in Germany the increase of the unemployment rate was short lived and was not as sharp as in CSEE countries. This suggests that the capacity of the CSEE countries to deal with economic downturns is limited. At the end of the analysed period (February 2014), the highest rate of unemployment (17.3%) was recorded in Croatia, while Czech Republic had the lowest unemployment rate (6.7%). The studied economies, as well as their labour markets (Lehmann and Muravyev, 2011) display considerable heterogeneity. Therefore, identification of the factors that could have lead to various patterns of the unemployment rate following the global economic and financial crisis is very challenging. Thus the selected methodology should enable dealing with these issues.

This paper investigates to what extent unemployment dynamics in the CSEE countries labour markets can be explained with external factors in the neighbouring CSEE countries and Germany. For that purpose, a global Global Vector AutoRegressive (GVAR) model is employed. To author’s knowledge, this paper is the first attempt to modelling the interaction between the CSEE countries labour markets using a global macroeconometric model.
The rest of the paper is organized as follows: the GVAR methodology applied in this paper is briefly described in Section 2. Section 3 provides a short overview of the employed data set and lists the sources from which the data were obtained. The main empirical results are analysed in Section 4 while section 5 concludes with a brief summary of the main results and suggestions for further steps in research.

2. UNEMPLOYMENT MODEL

The GVAR approach is applied to assess the importance of various factors in explaining the dynamics of the CSEE countries unemployment in a multi-country setting. The approach can be summarized as a two step procedure. First, individual country models are estimated, each containing domestic variables and foreign-specific variables. Although estimated separately, individual country models are connected by entering foreign-specific variables. Foreign-specific variables ($x_{it}^*$) defined as weighted averages of the corresponding domestic variables for the remaining countries, act as a proxy for common unobserved factors. Namely, $x_{it}^*$ are defined as

\[ x_{it}^* = \sum_{j=0}^{N} w_{ij} x_{jt} \]  

where $w_{ij} \geq 0$, $j = 0, 1, 2, ..., N$, $N$ are weights such that $\sum_{j=0}^{N} w_{ij} = 1$ and $w_{ii} = 0$ for every $i$. Weights $w_{ij}$ reflect importance of country $j$ for the economy of country $i$. In case of trade weights, $w_{ij}$ is share of country $j$ in the international trade of country $i$. Foreign-specific variables are modelled as weakly exogenous $I(1)$ variables which is a reasonable assumption considering that analysed CSEE countries are small open economies (SOE). Furthermore, the exogeneity assumption is a standard SOE literature assumption (Fleming (1962) and Mundell (1963)). In the second step, the estimated coefficients are stacked and solved in a global VAR model. The approach enables modelling interlinkages on various levels, both national and international and is based on a modified and generalised version of Johansen (1988, 1991, 1995) maximum likelihood approach. Under the weak exogeneity assumption, coefficients of the country specific models are estimated on the basis of reduced-rank approach developed by Johansen. Although Johansen’s approach is based on the assumption that all variables are endogenous and $I(1)$, Harbo et al. (1998) and Pesaran et al. (2000) modified the methodology to allow for weakly exogenous $I(1)$ variables.

GVAR model applied in this paper analyses $N+1$ economies, indexed by $i = 0, 1, 2, ..., N$, where index 0 denotes the reference country. In this paper index 0 denotes Germany, because of the dominant role it has regarding the CSEE countries. Domestic macroeconomic variables are related to its lagged values, deterministic variables (trend), foreign-specific variables and global variables. For country $i$ a VARX*(2,2) model that relates $k_i \times 1$ vector of domestic variables, $x_{it}$, with $x_{it}^*$, $k_i \times 1$ vector of foreign-specific variables is defined as:

\[ x_{it} = a_{i0} + a_{i1} t + \Phi_{i1} x_{i,t-1} + \Phi_{i2} x_{i,t-2} + \Lambda_{i0} x_{it}^* + \Lambda_{i1} x_{i,t-1}^* + \Lambda_{i2} x_{i,t-2}^* + u_{it} \]  

for $t = 0, 1, 2, ..., T$, $i = 0, 1, 2, ..., N$, where $\Phi_{i1}$ and $\Phi_{i2}$ are $k_i \times k$ matrices of coefficients related to lagged domestic variables, $a_{i0}$ and $a_{i1}$ are $k_i \times 1$ vectors of coefficients related to deterministic variables (intercept and trend), $\Lambda_{i0}$ and $\Lambda_{i1}$ are $k_i \times k_i^*$ matrices of fixed coefficients related to contemporaneous and lagged foreign-specific variables, and $u_{it}$ (error terms for country specific models) is a $k_i \times 1$ vector of country specific shocks. The approach assumes that $u_{it}$ is serially uncorrelated, with zero mean and non-singular covariance matrix, $\Sigma_{ii} = \text{diag}(\sum_{i,t} \sigma_{ii,t}^2)$, where $\sum_{i,t} \sigma_{ii,t} = \text{cov}(u_{it}, u_{it})$. Specifically

\[ u_{it} \sim i.i.d. \left(0, \Sigma_{ii} \right) \]  

The approach allows for cross-country correlation among the idiosyncratic shocks. Namely,

\[ E(u_{it} u_{it}') = \Sigma_{ii} \quad \text{for} \quad t = t' \]
\[ = 0 \quad \text{for} \quad t \neq t' \]

After estimating $N+1$ VARX* individual country models (2), individual models are stacked together and the GVAR model is then solved for the world as a whole.
3. DATA

Empirical model used in the empirical analysis consists of nine countries, including eight CSEE countries (Bulgaria, Croatia, Czech Republic, Slovakia, Romania, Poland, Slovenia and Hungary) and one advanced economy. The central variable of the model is unemployment measured as the rate of unemployment. Other variables in the model are the real effective exchange rate, real output, prices and share prices. The real effective exchange rate and real output were added to proxy for relative prices and domestic demand as they influence the standard of living. Additionally, oil prices and foreign specific variables were included in the model in order to capture possible unobserved common factors influencing the CSEE countries unemployment dynamics. Although GDP is a common measure of output, it is available only on quarterly basis. So the industrial production index was used as a proxy for output because it is available on monthly basis and thus reacts earlier to external shocks. Monthly data for the period from January 2000 to February 2014 were employed in the study, which makes a total of 170 observations. Data on unemployment, prices, real effective exchange rates and industrial production indices are obtained from Eurostat. Share prices were obtained from national stock exchange websites. Oil prices were obtained from the U.S. Department of Energy. All series were seasonally adjusted using the TRAMO/SEATS method within DEMETRA statistical program.

Vector of domestic variables ($x_0_i$) contains unemployment rate ($u_0_i$), real output ($y_0_i$), real effective exchange rate ($e_0_i$), prices ($p_0_i$) and share prices ($q_0_i$), for country $i = 1,...,8$ (all variables are in logs)

$$x_0_i = (u_0_i, y_0_i, p_0_i, q_0_i, e_0_i)'.$$

As a reference country, German economy ($i = 0$) is modelled differently to account for its importance for the CSEE countries. Model for the German economy also includes the price of oil ($p_0^i$), as an additional endogenous variable.

$$x_0_0 = (u_0_0, y_0_0, p_0_0, q_0_0, e_0_0, p_0)'.$$

Weights play an important role in a GVAR model as they are used in defining foreign-specific variables and in linking country-specific models. Similar to Pesaran et al. (2004), Dees and Saint-Guilhem (2009) and Dees et al. (2007), this paper employed fixed trade weights calculated as average trade flows for the period from 2008 to 2010 (Table 1). Although weights can also be time varying and they can be defined on the basis of data other than international trade (capital flows), they should not introduce additional randomness in the analysis. In defining trade weights IMF Direction of Trade Statistics (DOTS) data on international trade were used. Weights add up to one by column, but not by row.

<table>
<thead>
<tr>
<th>Country</th>
<th>bug</th>
<th>cze</th>
<th>hrv</th>
<th>hun</th>
<th>ger</th>
<th>pol</th>
<th>rum</th>
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<th>svn</th>
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<td>0.088</td>
<td>0.007</td>
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<tr>
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<td>0.024</td>
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<td>0.012</td>
<td>0.019</td>
<td>0.017</td>
<td>0</td>
</tr>
</tbody>
</table>

Source: authors’ calculation.

For all of the CSEE countries, Germany is the most important trading partner, its share ranging from 37.5% in Slovak Republic to 70.5% in Poland. Table 1 illustrates the insufficient involvment of the CSEE countries in the intra-regional trade flows, especially considering their geographical proximity. This indicates that the trade potential of the CSEE countries could be higher and expanding trade to regional markets, instead of relying solely on the large EU economies like Germany, could reduce the vulnerability of the CSEE economies to external shocks.

Using (4), $k_i \times 1$ vector of foreign-specific variables is

$$x^*_i = (y^*_i, p^*_i, q^*_i, u^*_i, e^*_i)',$$ for $i = 1,...,8,$

and for Germany,

$$x^*_0 = (y^*_0, p^*_0, q^*_0, u^*_0, e^*_0)'.$$
Both unit root tests, ADF (Augmented Dickey Fuller) and WS (weighted symmetric), indicate that all variables (domestic, foreign-specific and global variable) are $I(1)$. Therefore, the empirical analysis is performed under the assumption that all of the variables are $I(1)$. Furthermore, weak exogeneity tests indicate that all foreign specific variables are weakly exogenous. Results of the unit root and weak exogeneity tests as well as descriptive statistics for domestic, foreign-specific and global variable are available upon request.

4. EMPIRICAL RESULTS

Empirical results are obtained using GVAR Toolbox 1.1 (Smith and Galesi, 2010). The assessment of the relative importance of various factors of unemployment dynamics is carried through generalised forecast error variance decomposition (GFEVD). GFEVD estimates the proportion of the variance of the $h$-step ahead forecast errors of each variable that is explained by conditioning on contemporaneous and future values of the generalised shocks of the system. GFEVD is not sensitive to ordering of the variables in the country specific models which is very useful in the multi-country models like the one applied in this paper. Due to non-zero correlation between errors, the individual shock contributions to the GFEVD need not sum to unity. GFEVD results are shown in Tables 2-9 in terms of the ten most important determinants at the five-year horizon (60 months). The importance of the variables is ranked according to their contributions in explaining the forecast variance after two years following the shock. Tables also include the sum of the contributions of the ten most important determinants (row Sum 10) as well as the sum of all contributions (row Total).

Table 2. GFEVD of Bulgarian unemployment

<table>
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<tr>
<th></th>
<th>0</th>
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<tr>
<td>Sum 10</td>
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<td>0.7749</td>
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<td>1.1145</td>
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<td>1.0873</td>
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Source: authors’ calculation

Table 3. GFEVD of Croatian unemployment

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Source: authors’ calculation

1 Estimated VARX* model, model diagnostics and other empirical results not reported in the paper are available upon request.
### Table 4. GFEVD of unemployment in Czech Republic

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*Source: authors' calculation*

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*Source: authors' calculation*

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*Source: authors' calculation*
Table 7. GFEVD of Romanian unemployment

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Source: authors’ calculation

Table 8. GFEVD of Slovak Republic unemployment

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Source: authors’ calculation

Table 9. GFEVD of Slovenian unemployment

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<td>0.0148</td>
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<td>0.0083</td>
</tr>
<tr>
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<td>0.7823</td>
<td>0.9043</td>
<td>0.9423</td>
<td>0.9322</td>
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<tr>
<td>Total</td>
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<td>0.8746</td>
<td>1.0091</td>
<td>1.0902</td>
<td>1.1529</td>
<td>1.1890</td>
</tr>
</tbody>
</table>

Source: authors’ calculation
Tables 2-9 illustrate that not only are the economies of the studied countries heterogeneous: the determinants of the unemployment dynamics are heterogeneous as well. However, in the short run, the main determinant of unemployment dynamics in all of the analysed economies is domestic unemployment. Besides domestic unemployment rate, other important determinants of the short run dynamics are the German economy (Bulgaria (German real exchange rate), Poland (prices), Czech Republic and Slovenia (share prices)) domestic variables, like prices (Croatia), real exchange rate (Bulgaria) and real output (Romania). Another important factor are the neighbouring countries (Czech Republic). Unemployment rate of the German economy is an important determinant of the short run dynamics in all of the studied countries except Croatia and Romania.

In the long run, domestic economy is an important determinant of the unemployment dynamics only in Romania (unemployment and output), Croatia and Hungary (prices). Furthermore, neighbouring countries have a larger impact on the unemployment dynamics compared to the short run in Bulgaria and Croatia. In Slovenia, Slovakia and Czech Republic, German economy is the most important factor influencing the long run dynamics. It is interesting to note that oil prices are an important factor of the long run dynamics in Bulgaria and Hungary, in which other price variables (domestic prices, German prices and neighbouring countries prices) also play an important role.

So, what are the similarities among the countries with rising unemployment (Bulgaria, Croatia and Slovenia) and among the countries that that have decreasing unemployment rates (Czech Republic, Slovakia, Romania, Poland and Hungary)? In other words, is there a set of factors in common to these countries that could explain the difference in the pattern of unemployment rate. Clearly, by looking at the results presented in tables 2-9, the identification of a common set of factors is extremely difficult. For instance, Slovenia and Slovakia have similar determinants of unemployment dynamics, yet their unemployment rates have different patterns. On the other hand, Bulgaria and Croatia have in common that the domestic prices and, to a lesser extent, prices of the neighbouring countries play an important role in explaining the unemployment dynamics.

Therefore, the external factors and spillovers from Germany and the neighbouring economies were not the main reason why unemployment rate continued to grow in some CSEE countries. Possible reason why some countries unemployment rates continued to grow are weaknesses of the labour market (inflexibility, rigid legislation) or, in general, structural weaknesses of those economies. Those weaknesses were made evident in the recent global economic and financial crisis.

Additionally, the obtained results provide evidence of the importance the German economy has in explaining the unemployment dynamics in the CSEE countries. This justifies the use of the methodology employed in this paper.

5. CONCLUSION

This paper studies interactions between unemployment dynamics in the selected CSEE countries. A GVAR methodology is applied in order to account for influence and potential spillovers from factors in the neighbouring CSEE countries and Germany. The obtained empirical results show that the external factors and spillovers from Germany and the neighbouring economies were not the principal reason why unemployment rate continued to grow in some CSEE countries. Structural weaknesses of the domestic economies and their labour market, that were made evident in the recent global economic and financial crisis, are the probable reason for the continuance of an upward trend of the unemployment rate. The results also show the existence of a marked influence the German economy has on the economies of the CSEE countries. Thus stems the importance of modelling unemployment dynamics with a global macroeconometric model such as GVAR model employed in this paper. Future research should include a richer set of variables that could contribute to a better explanation of the unemployment dynamics. Obvious candidates are labour productivity and labour costs.

LITERATURE


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ABSTRACT

Financial derivatives are widely used tool for investors to hedge against the risk caused by changes in asset prices in financial markets. A usual type of hedging derivative is an asset option. In case of unexpected changes in asset prices in the investment portfolio the investor will exercise the option to eliminate losses resulting from these changes. Therefore, it is necessary to include the options to the investor’s portfolio in such ratio that the losses caused by decreasing of assets prices will be covered by profits from those options. The change of price of the underlying assets causes a change in the prices of options themselves. Therefore, for the investor exercising option as a tool of risk insurance it is important to quantify these changes. The dependence of option price changes on the underlying asset’s price changes is expressed by the parameter delta. The value of delta determines the composition of the portfolio to be risk-neutral. The parameter delta is expressed by derivation of the option price by the price of the underlying asset. Therefore, it is necessary to know the analytic formula for the option price. For different types of exotic options the analytical formula is not known, so that it is necessary to estimate the parameter delta numerically. The Finite difference method is the numerical method that can be used for the option price estimating. Using the principles of this method it is possible to estimate the value of delta numerically. In the paper the values of the parameter delta for a European call option calculated from the analytical formula and estimated from the Finite difference method are compared. It also deals with the impact of the values of input parameters on the accuracy of the parameter delta values using the Finite difference method.

KEY WORDS: Option, Exotic Option, European Call Option, Finite Difference Method, Delta parameter, Delta Hedging.

1. INTRODUCTION

The main motivation of the participants of financial markets to avoid of growing uncertainty is to look for new financial instruments. As the level of investment risk is increasing simultaneously, everyone who operates in financial markets has to react to market changes and to correct his investment strategy in time. Correctly used derivatives, for example options, can help investors to increase their expected returns and minimize their exposure to risk. The options were traded for the first time in 1973. Then the volumes of their trade had risen rapidly all over the world. (Whaley, 2006)

Setting the right price of all types of options, from basic types of vanilla options to more complicated types of exotic options, is a very important part of derivative trading. The Black – Scholes – Merton model for option pricing is at present one of the most famous tool for valuation of derivative contracts. Since the time of introduction Black – Scholes – Merton model, the volume of option trades significantly increased and next to European vanilla options various kinds of more complex types of exotic options were introduced. Standard types of options are traded actively and new types of options bring other possibilities for investors to hedge their investment portfolios. (Whaley, 2006)

On the other side some types of exotic options could be so complicated and difficult to price, that the Black – Scholes model in his basis could not be used to set their price. For someone of them the analytical pricing formula does not exists. Due to this fact it is for the investor much more complicated to create and correct his investment strategy, if the values of parameters used for investment strategy revision cannot be computed analytically. Then come into play the numerical methods. Using these methods the prices of exotic options can be estimated and therefore the values of required parameters can be obtained. One alternative of numerical options pricing is a Finite difference method based on the Black – Scholes differential equation. Using the principles of Finite difference method it is possible to estimate the value of parameters mentioned numerically.

2. TYPES OF OPTIONS

An option is an instrument giving its owner the right but not the obligation to buy or sell something at advance fixed price. A call option gives the holder the right to buy the underlying asset at the strike price in expiration time. A put option gives the holder the right to sell the underlying asset at the strike price in an expiration time. The price agreed
by the seller and the buyer in this contract is known as the strike price and the date, when the right given in the option will expire, is known as the expiration date or maturity. It is important to emphasize, that the option gives his holder the right to do something and the holder is not obligated to exercise this right. The ownership of the option provides only the right to do something not the obligation and this is why the owner of the option has to pay something for conclusion of such a contract. An option buyer pays the option premium for the right to buy or sell the underlying asset. (Whaley, 2006; Jarrow, Rudd, 1983)

All the simple derivatives such as American or European options are together called plain vanilla options. But besides these simple types of options there exist a large number of nonstandard products, which have been created at the over-the-counter derivatives market. These products are together termed as exotic options. Exotics may have uncertain exercise prices, expiration time and several underlying assets. They are designed for two reasons. The first reason is to reflect a view on potential future movements in particular market variables and to capture better the needs of traders to ensure their portfolio. And the second reason why exotic options are traded is that they appear to be more attractive tool for the traders to achieve profit. (Hull, 2012)

3. BASIC PRINCIPLES OF OPTION PRICING

Many scientific studies are devoted to analysis of different methods of options pricing because the valuation of options is very complex. Setting the correct price of each option traded on the financial market is very important for ensuring no arbitrage opportunities on the market.

The most popular pricing model is Black-Scholes model. This model is based on the theory that markets are arbitrage free and assumes that the price of the underlying asset is characterized by a Geometric Brownian motion. An analytic solution of this model for pricing European options is commonly used. The Black – Scholes model was improved by R. Merton in 1973. His approach was different from that of Black and Scholes. It was more general, because did not rely on some assumptions for the underlying asset. Merton includes into his model the assumption of the possibility of payment the dividend yield from the underlying share of the derivative. (Black, Scholes, 1973; Hull, 2012)

Another way to price the options is to use the numerical methods. There exist several types of numerical methods by which the price of most kinds of options, including more complex exotic options, which are “path dependent”, can be correctly estimated. Path dependent options have their payoff function dependent on a price development of the underlying option’s share. One alternative method for numerical options pricing is a finite difference method. This method is based on Black – Scholes – Merton partial differential equation and represents one possibility of option pricing. This numerical method could be very useful for the option pricing especially for some more complex types of exotic options, whose price have to be set numerically. (Hull, White, 1990)

3.1 Black – Scholes – Merton model

It is not easy to determine the right price of an option in practice. A big number of pricing models were generated to solve this problem. The Black-Scholes-Merton model is used to calculate a theoretical price of the option using the five key factors of an option’s price – underlying stock price, strike price, volatility, time to expiration and risk-free interest rate. The Black-Scholes-Merton model is derived under some assumptions validity. (Whaley, 2006; Hull, 2012)

Under the assumptions mentioned the Black – Scholes – Merton differential equation is valid for European type of an option with an underlying asset paying continuous dividend yield: (Hull, 2012)

$$\frac{\partial f}{\partial t} + \frac{1}{2} \sigma^2 S^2 \frac{\partial^2 f}{\partial S^2} + rS \frac{\partial f}{\partial S} - rf = 0.$$  \hspace{1cm} (1)

In this equation (1) we used the Merton’s approach, which allows the existence of continuous dividend yield \(q\), paid from the underlying asset. Hereabove in the equation (1), the following notation is used: \(f\) is the price of the derivative (option), \(t\) means the time, \(S\) is the price of the underlying share, \(r\) is risk – free interest rate, \(q\) is dividend yield rate, \(\sigma\) is the stock price volatility.

This equation has infinite number of solutions based on the selected initial conditions. For a European call option the solution of the BSM equation is a formula: (Hull, 2012)

$$c = Se^{-qT} N(d_1) - Ke^{-rT} N(d_2);$$  \hspace{1cm} (2)
where \( d_1 \) and \( d_2 \) are the values of the distribution function of a standard normally distributed random variable in \( d_1 \) and \( d_2 \) given by

\[
d_{1,2} = \frac{\ln(S/X) + (r - q \pm 0.5\sigma^2) T}{\sigma \sqrt{T}},
\]

(3)

The notation used is valid as before, here in (1) and (2), moreover \( X \) is the strike price and \( T \) is the time of maturity of the option. The formula (2) is the most famous solution of the BSM differential equation (1) and is known as the Black – Scholes – Merton model (pricing formulas) for the price of European call options.

4. DELTA-HEDGING

The option traders use sophisticated hedging schemes for hedging of their portfolio. As a first step, they attempt to make their portfolio immune to small changes in the price of the underlying asset in the next small time interval. This strategy is known as delta-hedging. They then look at the rate of change of delta with respect to the price of the asset what are known as parameter gamma. By keeping gamma close to zero, a portfolio can be made relatively insensitive to fairly large changes in the price of the asset. (Hull, 2012)

Parameter delta of the derivative is defined as the rate of change of its price with respect to the price of the underlying asset. Let \( \Delta \) be the delta of call option. This means that when the stock price change by a small amount, the option price changes by about \( 100.\% \Delta \) of that amount. Imagine an investor who has sold one option contract. His position in option contract could be hedged by buying \( \Delta \) shares of the stock. The gain (loss) on the option position would tend to be offset by the loss (gain) on the stock position. A position with a delta of zero is referred to as being delta-neutral. (Hull, 2012)

It is important to realize that the position of investor remains delta-neutral for only a relatively short period of time. This is because delta changes with both changes in the futures price and the passage of time. In practice, when delta hedging is implemented, the hedge has to be adjusted periodically. This is known as rebalancing. Hedging schemes such as this that involve frequent adjustment are known as dynamic hedging schemes. (Hull, 2012)

4.1 The delta of plain vanilla call option

The delta of European plain vanilla option is the rate of change in value of the option with respect to the change in the underlying asset price. This change can be calculated using the partial derivative of a option price with respect to the variable \( S \). Therefore the delta of a call option is

\[
\Delta = \frac{\partial c}{\partial S} = e^{-qt}N(d_1)
\]

(4)

The delta for a call option has a positive value and is increasing function of the underlying asset price. The behaviour of parameter delta of European call option for various times to maturity and also for some types of exotic options the delta has been studied in (Ďurica, Švábová, 2012), (Ďurica, Švábová, 2013) and (Ďurica, Švábová, 2014).

5. FINITE DIFFERENCE METHOD

The Black – Scholes – Merton equation (1) is a partial differential equation valid throughout the whole given domain. The aim of the Finite difference method is to reduce the domain of definition of option values into a finite number of points and to replace the partial derivations in equation (1) with given differences. Every interior point \( f_i \) of the grid has the value of the partial differential equations approximated with the differences of the values of the option in neighbouring nodes. (Hull, 2012). Especially, the Explicit finite difference method uses such approximations of partial derivations, which by being substituted to equation (1) leads to the formula for calculating the price of the derivative at that point directly:

\[
f_{i,j} = \frac{2\Delta S^2 f_{i+1,j} + \Delta t \Delta S (r - q) S_j f_{i+1,j+1} - f_{i+1,j-1}}{2r \Delta t \Delta S^2 + 2 \Delta S^2} + \sigma^2 S_j^2 \Delta t \Delta S^2 (f_{i+1,j+1} + f_{i+1,j-1} - 2f_{i+1,j})
\]

(5)

The equation (5) gives the relationship between three values of the option at time \( i \Delta t \) in points \( f_{i,j} \), \( f_{i,j+1} \) and \( f_{i,j-1} \) and one value of the option in following time \( (i + 1) \Delta t \) in the point \( f_{i+1,j} \).
In the grid of option values used in Explicit finite difference method, we move from the end of the grid to the beginning. At each node we calculate the value of the derivative using the expression (5). In this Explicit approach the values in all the interior points in the grid are given by the values of neighboring points in next time step in the grid. Using this we move in the grid from its right side to the left, where the value in every interior point is dependent on three points in next time on the right side of it. The situation is shown in the following figure.

**Figure 1.** Explicit finite difference approach of option pricing

Using this approach we repeat the calculations until we get the values in the left side of the grid in time zero.

### 5.1 Using the Explicit finite difference method for calculating delta

As we mentioned before, the value of delta can be calculated by a partial derivation of the option price with respect to the price of underlying share. Or we could calculate delta using the differences in the grid. Because we already have the values of the option prices in all points of a grid, we should calculate the value of parameter delta of the European call option using them. Then delta for every interior point of a grid will be the difference between the values of two neighboring points, upper and lower, divided by two lengths of share price subinterval:

\[ \Delta = \frac{f_{i,j+1} - f_{i,j-1}}{2AS} \]  

(6)

This is very useful especially in such cases of more complex exotic options, where the option price have to be set only by numerical method, because the analytical formula does not exist. This is very frequent situation, because some options are so complex, that the basic Black – Scholes – Merton model cannot be used for their pricing. So then they have to be priced only numerically. Then the value of parameter delta should be calculated from the numerical estimates of the option prices too.

### 5.2 Example

We will present estimating of the value of parameter delta using the differences in the Finite difference method grid by an example. Let us have an option with the strike price 25. This option will expire in 1 year. The risk–free interest rate is 10 % p.a. and the volatility is 10 % too. The underlying asset has a continuous dividend yield 5 % p.a.

We estimated the price of this option by Explicit finite difference method with a grid of 200 x 360 dividing points. That means the lifetime 1 year of the option was divided into 360 subintervals with length 1 day. Also the share price interval from 0 to maximum 50 was divided into 200 subintervals with step 0,25. Using the approach mentioned hereabovwe we get all the option prices in the grid points. Then we used these values to estimate the parameter delta from the option prices by (6).

In the following picture the values of delta for various times to maturity of the option is shown: 1 year, a half year, 1 month and 1 day.
As picture shows, the values of parameter delta are between 0 and 1, because from (5), those are the values of a distribution function of normal random variable. For underlying share price close to the strike price 25 the values of delta are changing very quickly with small changes in the underlying share price. For share prices far from the strike price 25 the values of delta are more stable, are not changing so much with small changes in the share price.

More, here we can see that as the time of maturity of the option is approaching, the option price becomes very sensitive to the small changes in underlying share price.

In the following figure the errors of delta values are shown. That are the differences between the delta values calculated from the pricing formula as the partial derivation (4), and the values estimated numerically using the Finite difference method grid by (6).

As we can see, the differences between these two values of delta are very small, close to zero. The biggest differences are for 1 day to maturity and close to the strike price of an option, where delta is very sensitive and its values are close to 0 or 1.

This is very good result, which means, that this numerical method can be used successfully for estimating the values of parameter delta. This parameter is most widely used hedging parameter. So for more complex types of exotic options this numerical method brings a possibility to estimate the value of this hedging parameter numerically.
6. CONCLUSION

As a result of our research, we could summarize, that the finite difference method can be successfully used for estimating the values of parameter delta used for hedging. This is valid not only for the parameter delta, but also for parameter gamma or theta, because we can use the differences instead of partial derivations used in the Black-Scholes-Merton model. As we supposed, using more dividing points in a grid brings more accurate results. This approach should be used for more complex options without the analytical formula too, so we could estimate delta of them numerically from Explicit finite difference method.

LITERATURE


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DOPING IN PROFESSIONAL SPORT: STUDENTS’ ATTITUDES

DRAGO PUPAVAC
VIOLETA ZUBANOV

ABSTRACT
The fundamental purpose of this study is to investigate students’ attitudes about the use of illegal substances (doping) of professional athletes in order to enhance top results, as well as doping control as a form of the fight against the use of illegal substances. Students of the Faculty of Sport and Tourism from Novi Sad (N=82) and students of the Business Department of the Polytechnic from Rijeka (N=86) participated in the research. To confirm the hypothesis of the softer attitudes of the students from the sports studies towards the use of illegal substances in sport, numerous scientific methods were applied and the method of descriptive statistics was particularly distinguished. The research results are based on data collected by the questionnaire consisting of 10 questions. The results provide important information on the similarities and differences between the students from different faculties in perceiving the use of illegal substances in sports.

KEY WORDS: doping, doping control, athletes, students, attitudes.

The spirit of sport is the celebration of the human spirit, the body and the mind. Doping is contrary to the spirit of sport, it erodes public confidence and jeopardises the health and well-being of athletes.
—World Anti-Doping Agency

1. INTRODUCTION
Doping is a more familiar term for the application of prohibited substances and is one of the biggest issues in sport. The illegal means include prohibited substances and prohibited methods. There are substances that are prohibited in competitions (stimulants, narcotics, cannabinoids, corticosteroids), substances that are prohibited in- and out-of-competition (anabolics, peptide hormones, growth factors and related substances, beta agonists, hormone antagonists and modulators, and diuretics and other masking agents), as well as prohibited methods (gain oxygen transfer, chemical and physical manipulation, gene doping) [1].

It is no secret that performance-enhancing drugs have been used by world class athletes and Olympians for decades, or that some athletes will do almost anything to gain a competitive advantage. The disqualification of athletes from recent Olympics and many other competitions for using performance-enhancing drugs bears witness to the potential negative sport related consequences of substance abuse. It is especially surprising that despite dire warnings about the negative psychological effects of steroids and other performance-enhancing drugs, their use appears to be on the upswing. Even the threat of death is evidently not a deterrent, as long as victory is guaranteed [2,471].

Despite the fact that many authors in the region (Erceg & Fatorini, 2011; Dukanović, 2011; Mačvanin et al., 2011; Pavlović & Idrizović, 2012; Mandarić & Delibašić, 2014) have been exploring this problem in contemporary sport in their recent works, it remained a topic of discussion mainly in professional and academic terms. In the region, the increased public awareness of this problem was realized only after the suspension of Marin Ćilić (CRO) and Viktor Troicki (SRB), as well as the calling of the world’s leading tennis player, Novak Đoković (SRB), to avoid doping controls. Accordingly, the aim of this paper is to explore the attitudes of students in the region on certain issues related to the use of illegal means of top athletes and prove the main working hypothesis that the students of sports studies have a softer stance towards the use of non-permitted assets in sports, compared to their colleagues from other studies.

2. PROBLEM AND RESEARCH METHODOLOGY
The use of drugs in sports in order to improve performance is a major problem for sports governing bodies. This, however, is not a new phenomenon. Some 5000 years ago, Shen Nung, the Chinese emperor venerated as the Father of Chinese Medicine, wrote about the use of Performance-Enhancing Substances. Drugs have been also used to enhance performance since ancient times. Greek and Roman civilisations used mushrooms and herbs to improve their performance. For example, Will Carroll notes in The Juice: The Real Story of Baseball’s Drug Problems (2005) that Spartan
coaches fed their athletes special herb and mushroom concoctions - during a period in which they were supposed to be consuming nothing but cheese and water - believed to render them oblivious to pain.

According to Carroll, the modern era of doping began with the development of injectable testosterone in 1935. Testosterone is a male hormone produced naturally by the body. Injecting additional testosterone into the system increases muscle mass and strength. Originally introduced by Nazi doctors to make soldiers more aggressive, it did not take long for laboratory-produced testosterone to make its way from the battlefield to the athletic field. German athletes dominated the medals in the 1936 Olympics, probably with the assistance of these newly developed synthetic drugs.

Doping in sports has increased dramatically since then. As the practice has grown, so have the methods for detecting it and keeping it from being detected. By the 1970s the use of performance-enhancing drugs had reached epidemic proportions among elite athletes. It was widely known that there were whole national sports programs whose success was based largely on sophisticated doping techniques, but scientists lacked the tools to prove what was going on. Yet, there was a breakthrough in 1983, when the newly developed technology for analysing blood for the presence of banned substances was deployed at the Pan Am Games in Caracas, Venezuela. The Associated Press reports in “Inquiry Set on Pan Am” (New York Times, September 14, 1983) that sixteen athletes from several countries were caught with performance-enhancing drugs in their system. Many other athletes, including twelve members of the U.S. track and field squad, withdrew from the event rather than risk the embarrassment of being caught cheating.

The first big-time Olympic disqualification due to steroids occurred in 1988, when the Canadian sprinter Ben Johnson (1961–) was stripped of both his gold medal and his world record in the 100-meter (109-yard) dash after testing positive for the banned steroid stanozolol. Years later, it was revealed that a number of U.S. track competitors had tested positive for illicit drugs before the 1988 Olympics in Seoul, South Korea. The latest seizure of medals from cyclist and Tour de France winner Lance Armstrong is certainly a surprising fact and warns all those who engage in doping substances that they can be detected and thus lose much more than their medals, prestige and honour in the world of sports. Or the example of Marion Jones and Tim Montgomery, who, after the discovery of THG doping, are no more masters of athletics.

Consider the results from a 1995 poll of 195 sprinters, swimmers, powerlifters, and other athletes, most of them U.S. Olympians or aspiring Olympians, who were given the following scenarios:

1) “If you were offered a banned performance-enhancing substance that guaranteed that you would win an Olympic medal and you could not be caught, would you take it?”
Remarkably, 195 of 198 athletes said yes.

2) The second question was: “Would you take banned performance-enhancing drug with a guarantee that you will not be caught, you will win every competition for the next 5 years, but then will die from the adverse effects of the substance.”

In answering the second question, 120 of the athletes said yes (approximately 60%) and 75 said no.

Hence, it is not surprising that by the end of the twentieth century the global sports community recognized that it would take a coordinated international effort to bring the problem of performance-enhancing drugs under control. WADA was created in 1999, as a collaborative initiative between sports agencies and governments across the globe. WADA’s role is to lead international efforts against doping in sports through public education, advocacy, research, and drug testing, and provide leadership for the agencies working against doping in individual countries.

International Convention against Doping in Sport was adopted on October 19, 2005 at the UNESCO headquarters in Paris and came into force on February 1, 2007, after being ratified by 30 countries. The Convention confirmation is a logical sequence of engagement and a further contribution of the Republic of Croatia and the Republic of Serbia in the creation of anti-doping policies in Europe and worldwide. At its session on July 6, 2007, the Croatian Parliament adopted the Law on Ratification of the International Convention against Doping in Sport, while the Parliament of the Republic of Serbia did it in May 2009.

Despite all the efforts made against the use of illegal substances in the sport, the last Olympics in London were also marked by doping scandals of some athletes. The gold medal was taken from the Belarusian shot putter Nadzeya Ostapchuk, who had been tested positive for Methenolone, and the bronze medal from Uzbek wrestler Soslan Tigiuev. This happened although before the Olympic Games in London it had been announced that half of the competitors would be tested for drugs by 150 scientists, who would take samples until the end of the Paralympic Games. It had also been stated that any athlete who would win a medal would undergo testing and that the Olympic anti-doping lab would test up to 400 samples per day, for more than 240 banned substances, while in the course of the competition, participants would be available for testing without any notice (BBC, 2012).
Problems with taking illegal substances did not miss Croatia. In 2011, Sandra Perković got a six-month ban on practicing athletics because of the doping offence. In Serbia, a little earlier, in 2008, eight positive doping cases among athletes were revealed, mostly among wrestlers (in 4 cases), and the rest was recorded for athletes in individual sports.

In order to achieve the research objective and investigate this problem in the modern sport, the following auxiliary hypotheses were defined:

$H_1$: Use of doping agents is the foundation for achieving top results.

$H_2$: Application of prohibited substances is inconsistent with the physical and mental integrity of the athlete, the Olympic principles and sport ethics.

$H_3$: Athletes and organizers of sports events are not prone to doping control.

$H_4$: Marin Čilić / Viktor Troicki would never use illegal means and thereby jeopardize his career.

In this paper, the scientific methods suitable for classroom work were used (analysis, synthesis, description, explanation, comparison, induction, deduction), while the primary data used in this paper were collected in the questionnaire. The poll included 168 students: 82 students from the Faculty of Sport and Tourism in Novi Sad and 86 students from the Business Department of the Polytechnic of Rijeka. Among them, 107 study participants (63.69%) were male and 61 (36.01%) female, and the age of the respondents ranged from 19 to 48 (M=26.17, SD=6.36). The survey was conducted in the winter semester of the academic year 2013/2014.

3. RESEARCH RESULTS AND DISCUSSION

The research results are presented in the following four sections.

3.1. Correlation between top results and use of doping agents

Professional sport is rife with drug-taking. Getting caught will get you banned, frequently for life. Yet people carry on doing it regardless. Why?

The distribution of responses to the claim that without the use of doping agents there are no top results is given in Table 1.

Table 1. The distribution of responses for the variable, without the use of doping agents there are no top results (n=168)

<table>
<thead>
<tr>
<th></th>
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<th>Rijeka</th>
<th>Total</th>
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<tbody>
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<td>I do not agree</td>
<td>55</td>
<td>69</td>
<td>124</td>
</tr>
<tr>
<td>I am not sure</td>
<td>9</td>
<td>13</td>
<td>22</td>
</tr>
<tr>
<td>I agree</td>
<td>18</td>
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<td>Total</td>
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<td>168</td>
</tr>
</tbody>
</table>

According to the data in Table 1, it is clear that significantly more students of sports studies (21.95%) believe that without the use of doping agents there are no top sport results. It is interesting that the students of both faculties, in almost the same percentage (88%), oppose the free use of doping agents (cf. Table 2).

Table 2. The distribution of responses for the variable, free use of doping agents (n=168)

<table>
<thead>
<tr>
<th></th>
<th>Novi Sad</th>
<th>Rijeka</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>I do not agree</td>
<td>72</td>
<td>76</td>
<td>148</td>
</tr>
<tr>
<td>I am not sure</td>
<td>6</td>
<td>9</td>
<td>15</td>
</tr>
<tr>
<td>I agree</td>
<td>4</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>82</td>
<td>86</td>
<td>168</td>
</tr>
</tbody>
</table>
The encouraging fact is that the majority of students (63%) denied the statement on the use of illegal substances for their own top sports results (cf. Table 3).

### Table 3. The distribution of responses for the variable, use of illegal substances for own top sports results (n=168)

<table>
<thead>
<tr>
<th></th>
<th>Novi Sad</th>
<th></th>
<th>Rijeka</th>
<th></th>
<th>Total</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>aps</td>
<td>%</td>
<td>aps</td>
<td>%</td>
<td>aps</td>
<td>%</td>
</tr>
<tr>
<td>I do not agree</td>
<td>55</td>
<td>67.0731</td>
<td>51</td>
<td>59.3023</td>
<td>106</td>
<td>63.09524</td>
</tr>
<tr>
<td>I am not sure</td>
<td>16</td>
<td>19.5122</td>
<td>25</td>
<td>29.06977</td>
<td>41</td>
<td>24.0476</td>
</tr>
<tr>
<td>I agree</td>
<td>11</td>
<td>13.41463</td>
<td>10</td>
<td>11.62791</td>
<td>21</td>
<td>12.5</td>
</tr>
<tr>
<td>Total</td>
<td>82</td>
<td>100</td>
<td>86</td>
<td>100</td>
<td>168</td>
<td>100</td>
</tr>
</tbody>
</table>

The percentage of those who would have never chosen to use illegal means in order to achieve their own top results is almost identical to that achieved by Pavlović & Idrizović (2013,107) in their research, using the sample of 100 students from the Faculties of Sports and Physical Education from Nikšić and Sarajevo. Based on the data from Table 3, it is evident that every fourth student is irresolute on this issue, while every eighth would decide pro this unauthorized step.

In conclusion, the additional hypothesis $H_1$ is confirmed, i.e. students think that the use of doping agents is the foundation to achieve top results, and the students of sports studies are prone to such thinking.

### 3.2. Health risks of drug use and sports ethics

The first known case of an athlete dying as a result of doping occurred in 1886, when the Welsh cyclist Andrew Linton died during a race from Paris to Bordeaux. The substance he ingested was thought to be Trimethyl, an alcohol-based product used by distance racers to ease pain and increase stamina. In 1960, at the XVII Olympics in Rome, the Danish cyclist Kurt Jansen Enemas, who, according to experts, received strong doses of amphetamine derivatives and nicotinic acid from his coach, died. It is obvious that the use of performance enhancing substances may lead to serious health risks and even death.

The distribution of responses to the question if doping agents undoubtedly negatively affect the health of the athletes is given in the Table 4.

### Table 4. The distribution of responses on the negative influence of drugs at the health of athletes (n=168)

<table>
<thead>
<tr>
<th></th>
<th>Novi Sad</th>
<th></th>
<th>Rijeka</th>
<th></th>
<th>Total</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Aps</td>
<td>%</td>
<td>aps</td>
<td>%</td>
<td>aps</td>
<td>%</td>
</tr>
<tr>
<td>I do not agree</td>
<td>2</td>
<td>2,439024</td>
<td>6</td>
<td>6,976744</td>
<td>8</td>
<td>4,761905</td>
</tr>
<tr>
<td>I am not sure</td>
<td>13</td>
<td>15,85366</td>
<td>38</td>
<td>44,18605</td>
<td>51</td>
<td>30,35714</td>
</tr>
<tr>
<td>I agree</td>
<td>67</td>
<td>81,70732</td>
<td>42</td>
<td>48,83721</td>
<td>109</td>
<td>64,88095</td>
</tr>
<tr>
<td>Total</td>
<td>82</td>
<td>100</td>
<td>86</td>
<td>100</td>
<td>168</td>
<td>100</td>
</tr>
</tbody>
</table>

Based on the data in Table 4, it is obvious that 81.7% of students from the Faculty of Sport and Tourism agree that doping agents adversely affect the health of the athlete, as opposed to 48.8% of students from the Business Department of the Polytechnic of Rijeka. According to the authors, this fact can be attributed to the fact that the students from the Faculty of Sport and Tourism are more familiar with this issue because of their educational content.

10.9% of the students from the Faculty of Sport and Tourism and 6.9% of the students of the Business Department of the Polytechnic of Rijeka share the same attitude that the use of doping agents in order to achieve the best results is not the violation of ethical precepts in sports because the others do the same. Almost the same percentages, about 80%, disagree with this statement (cf. Table 5).
Table 5. The distribution of responses for the variable ethical attitude about use of doping agents (n=168)

<table>
<thead>
<tr>
<th></th>
<th>Novi Sad</th>
<th></th>
<th>Rijeka</th>
<th></th>
<th>Total</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Aps</td>
<td>%</td>
<td>aps</td>
<td>%</td>
<td>aps</td>
<td>%</td>
</tr>
<tr>
<td>I do not agree</td>
<td>66</td>
<td>80.4878</td>
<td>68</td>
<td>79.06977</td>
<td>134</td>
<td>79.7619</td>
</tr>
<tr>
<td>I am not sure</td>
<td>7</td>
<td>8.53658</td>
<td>12</td>
<td>13.95349</td>
<td>19</td>
<td>11.30952</td>
</tr>
<tr>
<td>I agree</td>
<td>9</td>
<td>10.97561</td>
<td>6</td>
<td>6.976744</td>
<td>15</td>
<td>8.928571</td>
</tr>
<tr>
<td>Total</td>
<td>82</td>
<td>100</td>
<td>86</td>
<td>100</td>
<td>168</td>
<td>100</td>
</tr>
</tbody>
</table>

The students of the Faculty of Sport and Tourism have a clearer view on more severe sanctions for doping offences (cf. Table 6)

Table 6. The distribution of responses on more severe sanctions for doping offences (n=168)

<table>
<thead>
<tr>
<th></th>
<th>Novi Sad</th>
<th></th>
<th>Rijeka</th>
<th></th>
<th>Total</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>aps</td>
<td>%</td>
<td>aps</td>
<td>%</td>
<td>aps</td>
<td>%</td>
</tr>
<tr>
<td>I do not agree</td>
<td>8</td>
<td>9.756098</td>
<td>4</td>
<td>4.651163</td>
<td>12</td>
<td>7.142857</td>
</tr>
<tr>
<td>I am not sure</td>
<td>8</td>
<td>9.756098</td>
<td>17</td>
<td>19.76744</td>
<td>25</td>
<td>14.88095</td>
</tr>
<tr>
<td>I agree</td>
<td>66</td>
<td>80.4878</td>
<td>65</td>
<td>75.5814</td>
<td>131</td>
<td>77.97619</td>
</tr>
<tr>
<td>Total</td>
<td>82</td>
<td>100</td>
<td>86</td>
<td>100</td>
<td>168</td>
<td>100</td>
</tr>
</tbody>
</table>

First, the doubled number of students of the Faculty of Sport and Tourism, if compared with their counterparts, disagrees with this statement and second, only 9.7% of them, as opposed to 19.7% of the students of the Business Department of the Polytechnic of Rijeka is not sure about the necessity of taking tougher measures to punish athletes who use illegal substances. This can also be explained by the fact that sport students are far more knowledgeable on this issue, both theoretically and practically.

The distribution of responses to the above questions confirms the auxiliary hypothesis $H_2$, which states that the use of prohibited substances is contrasted to physical and mental integrity of athletes, the Olympic principles and sport ethics, and that the students of the Faculty of Sport and Tourism are prone to such thinking.

3.3. Reliability of doping controls

The first doping controls at the Olympic competitions were introduced in 1968, at the Winter Olympics in Grenoble and at the Summer Olympic Games in Mexico City in the same year. Over the next three decades, the International Olympic Committee and the National Olympic Committees have conducted their own doping control programs, but given the lack of consistency (everyone had their list of prohibited substances and methods) and the well-founded fear of conflict of interest, the World Anti-Doping agency (WADA) was established in 1999.

The cat-and-mouse game of doping and detection methods went on for more than three decades. If the inspector tests the athletes, and the athletes trust the inspection process to catch cheats, fear of getting caught should keep them strictly to the straight and narrow. Except that is not what seems to happen in the real world. Clearly, athletes do not think they will get caught. And Dr Buechel and his colleagues think they know why. In a working paper they started circulating among their peers earlier this year, they suggest that the real game being played here has yet another party in it—the fans and sponsors who pay for everything. In their view, the inspector has several reasons to skimp on testing. One is the cost. Another is the disruption it causes to the already complicated lives of the athletes. A third, though, is the fear of how customers would react if more thorough testing did reveal near-universal cheating, which anecdotal evidence suggests that in some sports it might. Better to test sparingly, and expose from time to time what is apparently the odd bad apple, rather than do the job thoroughly and find the whole barrel is spoiled and your sport has suddenly vanished in a hailstorm of disqualifications.

The detailed distribution of students' answers on the reliability of doping controls is given in Table 7.
Table 7. The distribution of responses on the reliability of doping controls (n=168)

<table>
<thead>
<tr>
<th></th>
<th>Novi Sad</th>
<th>Rijeka</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>aps</td>
<td>%</td>
<td>aps</td>
</tr>
<tr>
<td>I do not agree</td>
<td>19</td>
<td>23,17073</td>
<td>23</td>
</tr>
<tr>
<td>I am not sure</td>
<td>33</td>
<td>40,2439</td>
<td>48</td>
</tr>
<tr>
<td>I agree</td>
<td>30</td>
<td>36,58537</td>
<td>15</td>
</tr>
<tr>
<td>Total</td>
<td>82</td>
<td>100</td>
<td>86</td>
</tr>
</tbody>
</table>

Based on the data from Table 7 it is evident that twice the number of students from the Faculty of Sport and Tourism, if compared with their counterparts, expresses doubts about the reliability of doping controls. Towards the fact that the doping control is a “farce” students from both faculties have approximately the same attitudes, yet it should be remarked that the students of the Faculty of Sport and Tourism have a bit tougher stance (cf. Table 8).

Table 8. The distribution of responses on the doping controls as a “farce” (n=168)

<table>
<thead>
<tr>
<th></th>
<th>Novi Sad</th>
<th>Rijeka</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>aps</td>
<td>%</td>
<td>aps</td>
</tr>
<tr>
<td>I do not agree</td>
<td>27</td>
<td>32,92683</td>
<td>27</td>
</tr>
<tr>
<td>I am not sure</td>
<td>36</td>
<td>43,90244</td>
<td>44</td>
</tr>
<tr>
<td>I agree</td>
<td>19</td>
<td>23,17073</td>
<td>15</td>
</tr>
<tr>
<td>Total</td>
<td>82</td>
<td>100</td>
<td>86</td>
</tr>
</tbody>
</table>

Namely, almost every fourth student of the Faculty of Sport and Tourism considers the doping control a “farce”, and believes that most of the athletes are “on something.” This opinion has only every sixth student from the Business Department of the Polytechnic of Rijeka.

The students of sports studies also have a tougher attitude about the fact that the organizers of sports events are not prone to doping control (cf. Table 9).

Table 9. The distribution of responses about prone of organizers of sports events to doping control (n=168)

<table>
<thead>
<tr>
<th></th>
<th>Novi Sad</th>
<th>Rijeka</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>aps</td>
<td>%</td>
<td>aps</td>
</tr>
<tr>
<td>I do not agree</td>
<td>15</td>
<td>18,29268</td>
<td>16</td>
</tr>
<tr>
<td>I am not sure</td>
<td>41</td>
<td>50</td>
<td>52</td>
</tr>
<tr>
<td>I agree</td>
<td>26</td>
<td>31,70732</td>
<td>18</td>
</tr>
<tr>
<td>Total</td>
<td>82</td>
<td>100</td>
<td>86</td>
</tr>
</tbody>
</table>

Based on the data from Table 9, it is clear that almost every third student of the Faculty of Sport and Tourism believes that the organizers of sporting events are not prone to doping control. Their opinion shares every fifth student of the Business Department of the Polytechnic of Rijeka.

In conclusion, the additional hypothesis $H_3$ is confirmed, i.e. that athletes and organizers of sports events are not prone to doping control, while the students of the Faculty of Sport and Tourism are more prone to such thinking.

3.4. The attitude of students regarding the justification of the suspension of the national athletes

Serbia’s Troicki is serving a one-year suspension for failing to undergo a blood test in Monte Carlo in April 2013, while Čilić of Croatia serves a four-month ban for ingesting a prohibited substance contained in supplements bought by his mother.
from a chemist in Monte Carlo. Since sport is often “more than just a game” in this part of the world, the students of the Business Department of the Polytechnic of Rijeka were asked whether they believe that Marin Čilić would never use illegal means and thus jeopardize his career. The students of the Faculty of Sport and Tourism in Novi Sad were asked the same question, but for Viktor Troicki. The distribution of answers to this question is given in Table 10.

Table 10. The distribution of answers on the justification of the suspension of the national athletes (n = 168)

<table>
<thead>
<tr>
<th></th>
<th>Novi Sad</th>
<th>Rijeka</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>I do not agree</td>
<td>5, 6,097561</td>
<td>6, 6,976744</td>
<td>11, 6,547619</td>
</tr>
<tr>
<td>I am not sure</td>
<td>44, 53,65854</td>
<td>54, 62,7907</td>
<td>98, 58,3333</td>
</tr>
<tr>
<td>I agree</td>
<td>33, 40,2439</td>
<td>26, 30,23256</td>
<td>59, 35,11905</td>
</tr>
<tr>
<td>Total</td>
<td>82, 100</td>
<td>86, 100</td>
<td>168, 100</td>
</tr>
</tbody>
</table>

35.1% of the respondents agree that these athletes would not ever use illegal substances. Even 58.3% of respondents are not sure while 6.5% of them express their disagreement with the above statement. A slightly higher percentage (40.24%) of the students from the Faculty of Sport and Tourism express confidence in the national tennis players, which actually confirms the softer attitude of students from the Faculty of Sport and Tourism towards the use of illegal substances in the sport compared to their counterparts from the Business Department of the Polytechnic of Rijeka.

4. CONCLUSION

The results presented in this paper confirm the initially assumed, gentler attitude of students of sports studies towards the use of illegal substances in the sport, in order to achieve top results. In fact, a significant number of them (21.95%) believe that without their use superior athletic performance cannot be achieved. The vast majority of students of sports studies (81.7%) agree with the statement that doping agents negatively affect health, as well as a complete physical and mental integrity of the athletes, and that their use is inconsistent with ethical and Olympic principles in sport. It is interesting to point out that sport students have a tougher stance towards doping control, declaring negatively on their validity, but also on the willingness of the organizers and contestants to be involved in such controls. The ethics of the observed top national athletes and confidence in them is not in question - the distribution of responses related to this issue shows a milder attitude of the students of sport (40.24%) compared to the students of business studies (35.1%). From these results it is evident that the quality and proper molded education (both on the theoretical and practical levels) can establish clear attitudes on the use of doping in professional sports and recognize new information about the similarities and differences in the way in which students of different studies perceive the use of illegal substances in sport. According to the authors, these results provide further public sensibility for this, not only health, but also to a large extent, ethical dimension of professional sport.

LITERATURE

1. BBC (2012). London 2012. All medallists to be drugs tested at Olympics. BBC News Online. Available at: http://www.bbc.co.uk/sport/0/olympics/18849517

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AN APPLICATION OF THE THEORY OF INTERPERSONAL BEHAVIOR TO DIGITAL PIRACY AMONG ADULT CONSUMERS

MATEJA KOS KOKLIĆ
IRENA VIDA

ABSTRACT
Digital piracy continues to represent a growing phenomenon and one of particular concern to movie, software and music industries as well as to final consumers. In this study, we aim to address this phenomenon by utilizing a relatively overlooked yet comprehensive model of choice behavior, the Theory of Interpersonal Behavior (TIB) (Triandis 1980), and testing the model on a sample of adult Internet users. Following the basic premise of TIB, we suggest an individual's intention to engage in digital piracy is influenced by perceived consequences (benefits and risk), affect and norm susceptibility. Further, we hypothesize that piracy intention together subjective knowledge leads to actual piracy behavior. We use survey data from an EU member country to test the system of structural relationships. Our results show that piracy intention and subjective knowledge influence digital piracy behavior, while perceived positive consequences, affect and norm susceptibility significantly shape individual's piracy intention.

KEY WORDS: Theory of interpersonal behavior, Digital piracy, Perceived consequences, Piracy intention, Piracy behavior.

1. INTRODUCTION
Digital piracy or consumer practice of illegally downloading files from the Internet continues to represent a growing phenomenon and one of particular concern to movie, software and music industries as well as to final consumers (Taylor, Ishida, and Wallace, 2009). According to BASCAP (2011), a platform that connects all business sectors worldwide, digitally pirated music, movies and software will account for between $80 billion and $240 billion in 2015. As a result, companies from the aforementioned industries are allying with governmental and policing circles to tackle the piracy problem. In spite of widely stated loss estimates, some studies identified certain benefits of digital piracy for the industry and consumers. For example, piracy could help companies develop new products in the introduction and growth stage (Prasad and Mahajan, 2003), raise sales of ancillary products (Curien, Laffond, Laine, and Moreau, 2004), and increase sales of legitimate goods based on consumer “sampling” of pirated goods (U.S. Government Accountability Office, 2010). Similarly, both negative and positive effects have been recognized on the side of consumers. On the one hand, studies demonstrate potential costs due to e.g., failed performance or legal enforcement (Liao, Lin, and Liu, 2010; Sinha and Mandel, 2008). On the other hand, consumers may be introduced to better products at moderated prices due to “shadow” competition (Lahiri and Dey, 2013).

Although a well-researched phenomenon, digital piracy still lacks effective measures to leverage its incidence. In general, two approaches have been employed to combat piracy: preventives and deterrents. The former refer to the provision of additional benefits to legitimate consumers, charging low prices, and/or the use of hardware and software technology to prevent digital piracy. The deterrents refer to the use of educational and legal campaigns and sanctions to reduce piracy. More specifically, activities disseminate litigious information about piracy to the public (Gopal and Sanders, 1997; Jeong and Khouja, 2013). Despite the numerous attempts to curb digital piracy, it is still prevalent and is expected to increase. As a result, scholars devote their effort to studying the antecedents of digital piracy. It is believed that cognizance of underlying motivations to pirate can greatly enhance future public policy and industries’ actions (Cheng, Sims, and Teegen, 1997).

The purpose of this study is to gain insight into the factors of digital piracy among adult computer users. We aim to address some of the existing gaps in the literature; hence, this research has two primary objectives. The first objective is to utilize a comprehensive model of choice behavior in determining some of the key factors influencing digital piracy. Thus, we hope to contribute to the existing literature by using a relatively overlooked theory in the field of marketing, but more established in social psychology, informatics and management studies. The second objective is to empirically test the proposed model in the context of pirating digital content. Along these lines, we also intend to overcome a well-known limitation of previous studies, that is, we employ a sample of adult Internet users instead of relying solely on students.

The remainder of the paper is organized as follows. First, we briefly review the existing literature on some of the theoretical frameworks applied in studying digital piracy and counterfeiting behavior. Next, we present theoretical grounding for hypotheses development and continue with presentation of methodology used in our study. In the chapter before making final conclusions we analyze the data using structural equation modeling.
2. THEORETICAL FRAMEWORK

A vast majority of existing studies applies models of attitude-behavior relations, such as the Theory of Reasoned Action (TRA) (e.g., Aleassa, Pearson, and McClurg, 2011) and the Theory of Planned Behavior (TPB) (e.g., Cronan and Al-Rafee, 2008). Although prominent theories, they have been subjected to criticism that attitudes alone are often poor predictors of actual behavior (e.g., De Pelsmacker and Janssens 2007). Moreover, a substantial amount of variance in buying behavior remains unexplained by these models, suggesting that other relevant variables should be included when studying various kinds of social behavior (Bamberg and Schmidt, 2003; Shaw et al., 2005). In addition, many piracy studies employ student samples and thus omit other relevant groups. Namely, students are often considered inadequate because of their poor representation of the general population (Yoo and Lee 2012).

In this study, we seek theoretical grounding in the Theory of Interpersonal Behavior (TIB) (Triandis 1980). TIB is recognized as a more comprehensive theory as it extends upon the antecedents of behavior predicted by the two most widely used models of behavior: TRA and TPB. Namely, TIB has been shown to account for more variance in a model when compared to TRA and TPB (Bamberg and Schmidt, 2003). This theory covers emotive as well as habitual dimensions and recognizes that individual’s behavior is not always rational (McDonald, 2014). Despite these strengths, there is a dearth of digital piracy studies that rely on Triandis’ model as a conceptual framework. For example, Ramayah et al. (2009) use Triandis’ theory to examine Internet piracy among university students, while Limayem, Khalifa, and Chin (2004) examine factors that influence software piracy.

According to TIB, individual’s behavior is a function of intention to engage in this behavior, facilitating conditions, and the strength of habit in performing the behavior. Intention, in turn, depends on perceived consequences of the behavior, affect towards performing behavior and social factors (Pee, Woon, and Kankanhalli, 2008). While intention refers to the individual’s motivation regarding the performance of the behavior, facilitating conditions refer to objective factors present in the environment that are instrumental in achieving a certain task. Habits are described as situation-behavior sequences that are or have become automatic and which occur without self-instruction. Further, each act of behavior may lead to positive or negative outcomes, thus consumers believe this act has certain perceived consequences. Affect refers to an individual’s emotional feelings: the ‘feeling of joy, elation, or pleasure, or depression, disgust, displeasure, or hate associated by an individual with a particular act (Triandis, 1980). Social factors are described as those norms, roles, and values at the societal level that influence an individual’s behavior (Limayem et al., 2004).

Against this theoretical background, a truncated conceptual model of digital piracy is proposed, where we focus on piracy behaviour and intention, knowledge, perceived consequences, affect and social factor (Figure 1). We posit that digital piracy behaviour depends on individual’s intention to engage in piracy and their subjective knowledge about where and how to reach digital content. In this case, subjective knowledge helps an individual make certain behaviour easy to perform and thus facilitates behaviour (facilitating condition). Moreover, facilitating conditions may be considered as factors in individual’s environment that make a behavior easy to perform, having either situational (e.g., access to resources) or internal dimension (e.g., knowledge) (Pee et al., 2008). Consistent with TIB, we also posit that one’s piracy intention depends on three factors: perceived consequences (benefits and risks), affect and social factor (norm susceptibility). When engaging in digital piracy, an individual anticipates certain consequences that can be either positive (benefits from pirating) or negative (risks from pirating). Not only consequences, also feelings associated with illegal downloading are suggested to impinge upon one’s future intent. Another driver of piracy intention is social factor defined as norm susceptibility (i.e. conformity to reference group norms).

Figure 1. Conceptual model of digital piracy based on Triandis’ theory of interpersonal behavior
3. HYPOTHESES DEVELOPMENT

Following the basic premise of TIB, we suggest an individual’s intention to engage in digital piracy, defined as a conscious plan to carry out this behavior (Eagly and Chaiken 1993), leads to actually engaging in pirating digital content from the Internet (H1). This hypothesis rests on the previously established evidence of significant influence of intention on actual behavior in the digital piracy context (e.g., Taylor, 2012).

H1: Piracy intention positively influences piracy behavior.

Together with intentions, facilitating conditions are usually hypothesized as an accurate predictor of actual behavior (Triandis 1980). In this study, we examine subjective knowledge, a concept rarely considered in the digital piracy research. One of the few studies that empirically tested the influence of consumer’s perceived knowledge on behavior was conducted by Hennig-Thurau, Henning and Sattler (2007). Hence, we hypothesize an individual’s perceived knowledge of where and how to share files positively influences their digital piracy behavior (H2).

H2: Subjective knowledge positively influences piracy behavior.

According to Triandis (1980), each act of behavior is perceived as having potentially positive or negative outcome. When pirating digital content is perceived as having positive outcomes (benefits) individuals will be more motivated to engage in digital piracy. In the existing piracy studies, several authors attested to a significant impact of perceived benefits on the intentions to pirate, e.g. Hennig-Thurau et al. (2007) and Lysonski and Durvasula (2008). Thus, it is suggested that perceived positive consequences are positively related to future piracy intent (H3).

H3: Perceived benefits positively influence piracy intention.

By contrast, when digital piracy is perceived as having unfavorable outcomes individuals are less likely to form intention to engage in digital piracy. Along these lines, Sinha and Mandel (2008) show that an increased risk of getting caught significantly lowers the tendency to pirate. Somewhat unexpected was their finding that for certain groups of consumers increasing perceived risk led to increase in their likelihood to pirate. To tackle this controversy, we hypothesize that an individual’s perception of technical risk decreases their intention to pirate (H4).

H4: Perceived risk negatively influences piracy intention.

To better explain intention, Triandis (1980) also included a purely affective measure of attitude toward behavior. Affective aspect has rarely been investigated in the digital piracy context, with the exception of e.g., Al-Rafee and Cronan (2006) who examined the impact of affective beliefs in form of happiness and excitement on attitudes toward pirating digital material. In the context of digital piracy, we expect that positive affect experienced from pirating digital content will be positively related to one’s intent to engage in such behavior in the future (H5).

H5: Affect positively influences piracy intention.

According to TIB, another significant determinant is social factors which involve an individual’s internalization of the reference group’s subjective beliefs with respect to the behavior. In this study social factor is viewed as the extent to which an individual seeks compliance in pirating digital content (as a form of norm susceptibility). It has been suggested that there is a positive relationship between social factors and intention to engage in certain behavior (e.g., Limayem et al., 2004). Thus, we posit that social factor positively influences one’s intent to pirate digital content (H6).

H6: Norm susceptibility positively influences piracy intention.
4. METHODOLOGY

The model depicted in Figure 1 was tested on a nationally representative sample of 10,000 consumers who had permanent residence in Slovenia and were at least 18 years old. The sample was obtained from the National Statistical Office and was representative of the population in terms of age, gender, type of settlement and region. Although a total of 1,523 self-administered paper questionnaires were returned, 910 respondents were included in the present study in order to test the stated hypotheses. A prerequisite for the inclusion in this study was the respondents’ engagement in pirating digital content. Namely, only those respondents who had at least some experience with illegal downloading were included in the study.

The final sample consisted of 57.3% females and 42.7% males, while their average age was 43 years (standard deviation of 16.7). More than 60% of all respondents (62.3%) reported to have completed secondary school, 27.8% stated they completed university, 7.8% finished graduate studies, and 2.2% of the respondents completed primary school. Over half of participants in the study (53.6%) is employed full-time, 17.9% of the sample declared to be students, 13.6% were retired, and 10.3% were not working at the time of filling out questionnaires. The rest of the sample was either part-time employed (2.9%) or on temporary leave (1.9%).

The construct measures were based on the existing literature, but were adapted to the specific research context. All constructs were measured on seven-point Likert-type scales except piracy behavior. The latter was measured as a number of units that respondents had illegally downloaded in the previous month in various categories (films / TV episodes, music tracks, games software, business / application software, books). As a measure that encapsulates very recent behavior, it is used as a proxy for current behavior. We operationalize the piracy intention construct as the likelihood that a consumer will illegally download files from the Internet in the future (or within the next month). A two-item scale designed by Taylor and Todd (1995) was applied to measure future piracy intent. Next, subjective knowledge is operationalized as knowledge possessed by an individual with regard to file-sharing and downloading. We implement the consumer file-sharing knowledge scale previously used by Hennig-Thurau et al. (2007). Perceived benefits are captured by three statements referring to specific benefits of illegal downloading perceived by an individual (cfr. Hennig-Thurau et al., 2007). Perceived risk was operationalized as potential adverse consequences of illegally downloading files that could affect an individual’s computer and their data. As in case of benefits, perceived risk was also measured with three statements partly adapted from the scale of technical costs of the copy by Hennig-Thurau et al. (2007). In our study, affect is operationalized as an individual’s positive emotions associated with illegally downloading files. The three items measuring affect were drawn from previously conducted studies by Cronan and Al-Rafee (2008) and de Matos, Ituassu, and Rossi (2007). Norm susceptibility was measured with six items (cfr. Bearden, Netemeyer, and Teel, 1989) and is defined as the extent to which consumers changed their initial decision because of their relevant others’ differing opinion.

5. DATA ANALYSIS

Based on Anderson and Gerbing’s (1988) recommendations, the data analysis consisted of two steps. First, a Confirmatory Factor Analysis with LISREL was used to check the validity and reliability of the measurement items. Then, full-information structural equation modeling was employed to examine the structural relationships in the model. The model fit measures showed the data conform well to the model ($\chi^2 = 931.13$, d.f. = 194, $p < 0.00$, GFI = 0.915, CFI = 0.941, RMSEA = 0.065, SRMR = 0.045). All the multiple-item constructs display adequate composite reliability (CR) and average variance extracted (AVE). More specifically, CR values ranged between 0.79 and 0.90 and AVE values varied between 0.56 and 0.80, with cut-off values of 0.50 and 0.70, respectively (see Table 1).
<table>
<thead>
<tr>
<th>Scale Item</th>
<th>AVE</th>
<th>CR</th>
<th>Standardized factor loading (t-value)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Piracy intention</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I intend to illegally download files from the Internet in the future.</td>
<td>0.80</td>
<td>0.89</td>
<td>0.92 (7.31)</td>
</tr>
<tr>
<td>If the need or opportunity arises within the next month, I would illegally download files.</td>
<td>0.87 (11.60)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Subjective knowledge</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I know several different file sharing networks.</td>
<td>0.70</td>
<td>0.90</td>
<td>0.72 (19.96)</td>
</tr>
<tr>
<td>I know how to find and illegally download software from file sharing networks on the Internet.</td>
<td>0.92 (13.38)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I know how to use file sharing software in order to illegally download files from these networks.</td>
<td>0.95 (9.24)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I know how to configure my firewall in order to be able to access file sharing networks.</td>
<td>0.73 (19.83)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Perceived benefits</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Illegally downloading files increases my ability to collect music/films/games.</td>
<td>0.58</td>
<td>0.80</td>
<td>0.77 (14.91)</td>
</tr>
<tr>
<td>Illegally downloading files allows me to have files that I would not be able to afford.</td>
<td>0.79 (14.20)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Illegal downloading helps me get music/films/games faster compared to legal channels.</td>
<td>0.72 (16.50)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Perceived risk</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Illegally downloading files is risky because:</td>
<td>0.56</td>
<td>0.79</td>
<td>0.79 (11.30)</td>
</tr>
<tr>
<td>They might infect your computer with a virus or malware.</td>
<td>0.65 (17.16)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>They might damage your computer.</td>
<td>0.79 (11.40)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Affect</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Illegally downloading files would make me feel satisfied.</td>
<td>0.62</td>
<td>0.83</td>
<td>0.71 (17.99)</td>
</tr>
<tr>
<td>I like illegally downloading files from the Internet.</td>
<td>0.89 (9.72)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Illegally downloading files would make me feel happy.</td>
<td>0.74 (17.19)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Norm susceptibility</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>It is important that others like the products and brands I buy.</td>
<td>0.60</td>
<td>0.90</td>
<td>0.69 (19.34)</td>
</tr>
<tr>
<td>If other people can see me using a product I often purchase the products and brands they expect me to buy.</td>
<td>0.74 (18.65)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I like to know what brands and products make a good impression on others.</td>
<td>0.73 (18.80)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I achieve a sense of belonging by purchasing the same products and brands that others purchase.</td>
<td>0.83 (16.41)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>If I want to be like someone I often try the products and brands that they buy.</td>
<td>0.83 (16.26)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I often identify with other people by purchasing the same products and brands they purchase.</td>
<td>0.82 (16.85)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As suggested in the first hypothesis, the data confirm that the intention to pirate is positively related to actual digital piracy behavior (std. factor loading = 0.10). We also find support for the hypothesis that knowledge of how and where to share files leads to digital piracy behavior (std. factor loading = 0.56). Similarly, we find significant positive relationship between perceived benefits and future piracy intent (std. factor loading = 0.32). Although we expected a significant negative influence of perceived risk on piracy intention, we could not provide empirical evidence for a statistically significant relationship. However, there seems to be a strong positive relationship between affect and piracy intention as suggested in Hypothesis 5 (std. factor loading = 0.54). Contrary to our expectations, we found a negative relationship between norm susceptibility and
intention (std. factor loading = -0.13). That is, the more people adhere to norms and beliefs or relevant reference groups, the less likely they are to form piracy intentions. The results are summarized in Table 2.

Table 2. Testing the conceptual model

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Structural path</th>
<th>Standardized factor loading (t-value)</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1: +</td>
<td>Piracy Intention → Piracy Behavior</td>
<td>0.10* (2.73)</td>
<td>Supported</td>
</tr>
<tr>
<td>H2: +</td>
<td>Knowledge → Piracy Behavior</td>
<td>0.56* (14.41)</td>
<td>Supported</td>
</tr>
<tr>
<td>H3: +</td>
<td>Perceived Benefits → Piracy Intention</td>
<td>0.32* (7.81)</td>
<td>Supported</td>
</tr>
<tr>
<td>H4: -</td>
<td>Perceived Risk → Piracy Intention</td>
<td>0.02 (0.59)</td>
<td>Not supported</td>
</tr>
<tr>
<td>H5: +</td>
<td>Affect → Piracy Intention</td>
<td>0.54* (11.92)</td>
<td>Supported</td>
</tr>
<tr>
<td>H6: +</td>
<td>Norm Susceptibility → Piracy Intention</td>
<td>-0.13* (-4.38)</td>
<td>Not supported</td>
</tr>
</tbody>
</table>

Model fit: χ² = 931.13, d.f. = 194, p < 0.00, GFI = 0.915, CFI = 0.941, RMSEA = 0.065, sRMR = 0.045
Note: * significant at .05 level (one-sided)

6. CONCLUSION

This research offers new insights into the dynamic nature of acquiring illegal digital content by applying a relatively underresearched Theory of Interpersonal Behavior and testing it on a sample of adult computer users. The results show that individual's piracy intent and their subjective knowledge of downloading significantly impinge on digital piracy behavior, while perceived positive consequences, affective attitude and norm susceptibility significantly shape individual's piracy intention. However, we could not provide empirical support for the hypotheses that perceived risk negatively influences future piracy intention and norm susceptibility positively impacts intention.

Interestingly, it seems that compared with future piracy intention, subjective knowledge is a significantly stronger determinant of piracy behavior (with path coefficients 0.56 and 0.10 respectively). Both one's intent and their subjective knowledge about file-sharing and downloading tend to increase the level of engaging in digital piracy behavior. These findings are consistent with previous studies in the domain of digital piracy. For example, Ramayah et al. (2009) demonstrate that intention to pirate leads to actual Internet piracy behavior among university students. Furthermore, Hennig-Thurau et al. (2007) show that consumer file-sharing knowledge correlates positively with the number of illegal movie copies that an individual watches.

With regard to future piracy intention, three drivers significantly shape one's contemplation of potential future action. Namely, perceiving desirable consequences of pirating digital content and experiencing positive emotions associated with illegally downloading files both encourage the tendency to engage in future digital piracy. Contrary to our expectations of a positive influence, norm susceptibility (a consideration of relevant others' opinions) significantly reduces one's piracy intention. A plausible explanation might be that respondents believe their significant others do not approve of their piracy behavior and thus they suppress their tendency to pirate. Besides fearing that relevant others will not approve of digital piracy behavior, another potential reason is our choice of the original measurement scale which was drawn from the study by Bearden et al. (1989). Hence, it was not tailored to the specific digital piracy context, but instead addressed situations of purchasing products and brands in general.

The only construct that seems to exhibit no significant impact on piracy intention is perceived risk. Apparently, potential technical difficulties of pirating digital content are not crucial in consumers' consideration of future piracy actions. This might be due to a greater prominence of other constructs in the model, such as affect. It is possible that consumers do not perceive any technical difficulties from pirating digital content, but might experience other types of negative consequences that were not captured in our measure of perceived risk.

Among the three significant drivers, affect was the strongest determinant of piracy intention (with path coefficient 0.52). This finding underpins Triandis' (1980) contention that affect (emotions) is a significant aspect that needs to be considered in modeling human intention formation. Together with subjective knowledge, these are two most promising areas to build upon when creating public policies as well as company strategies. For example, when designing marketing communications, applying the affective component might prove fruitful in alleviating the digital piracy phenomenon.

There are several limitations for this study. First, the measurement scales used in our research have a limited scope and do not capture some other facets that might prove relevant in shaping one's digital piracy intent and behavior. Including other aspects, such as psychological risk (Liao et al., 2010) should be applied in future research. Second, only a subset
of the original Triandis’ model was tested in this study. Here, omitting habits as a potentially construct in an individual’s routine piracy behavior might have reduced the strength of the proposed model. Third, we employed a cross-sectional design. Instead, observing constructs through a longer time span could allow for stronger inference. Despite these limitations, we hope the study contributes to the existing literature in the field of digital piracy.

LITERATURE

ANALYSIS AND EVALUATION OF THE NAUTICAL TOURISM IN THE REPUBLIC OF CROATIA AND ITS IMPACT ON DESTINATION DEVELOPMENT
ANAMARIJA ZUBAK
ALEN JUGOVIĆ
GORANA STUMPF

ABSTRACT
Nautical tourism is the most perspective industry in the Republic of Croatia. Its growth and development in the last ten years made nautical tourism one of the most competitive and profitable „tourist product“. The paper analyzes and evaluates current state of the nautical tourism in the Republic of Croatia with specific references to the management of the nautical ports. The aim of the paper is to indicate a high level of development and further growth of nautical tourism and to attempt to provide an answer if the nautical tourism has a significant and economic impact on the gravitating destination.

The profit from nautical tourism is not commensurate to its potentials. Analyzing current state and dynamics of its growth we can define some basic regulations, which are indicating that its significant growth is still to expect. The results revealed constant growth of nautical tourism and its major impact on destination development.

KEY WORDS: nautical tourism, economic growth, destination development, Republic of Croatia.

1. INTRODUCTION
The modern development of nautical tourism in Croatia appeared at the end of the 60s this past century. Over the time, as many new technical and technological achievements were made, so the nautical tourism was gradually modernized. It was separated from other types of tourism, and it became an elite tourism, available only to wealthier classes of citizens. Today, it is attracting more and more attention because of an economic importance to the local and national economy.

Law on the Provision of Tourism of Republic of Croatia, defined the notion of nautical tourism as a “voyage and the stay of nautical tourists on vessels such as yachts, small boats, and boats for personal use or commercial activity, as well as stay in ports of nautical tourism, for rest and recreational purposes”. Nautical tourism essentially covers any fun, scientific or sports movement on the aquatic sea surfaces, for tourism purposes, by various marine vessels. At the same time it is considered as a mass kind of tourism, due to the large number of people who participate in it, and since it is based on sailing, it is therefore mobile. Considering the consumption of boaters, it can also be called an exclusive type of tourism.

The goal of this scientific research is, based on analysis, to give an assessment of the current state of nautical tourism in Croatia, and to point out the fact that, in Croatia, it has reached a high level of development, but also its further development is expected. Special attention has been given to the business activity of ports of nautical tourism, as the main actuators of local and national economy. Nowadays, they have become factors in development, in not only related businesses but also in other less related businesses, and in such destinations where nautical tourism is developing. Therefore, one of the main hypothesis of this research paper, is the one that is based on the fact that nautical tourism is one of the leaders of economic development of the destination in which it is located.

Republic of Croatia has an enormous natural potential, and with that, good qualities to attract a significant segment of demand for nautical tourism. Jagged coastline and numerous islands and islets, are the main advantages of the development of nautical tourism in Croatia. In order to take full advantage of these benefits, limiting factors should be partially or completely removed, such as an insufficient number of moorings in nautical ports, poor offer and also low quality of services in marinas. The future development can thus be achieved with systematic strategic thinking, at which particular focus should be on maximum usage of capacities of the moors in the existing ports, on building the quality infrastructure, and also enriching the offer for boaters.
2. THE ANALYSIS OF NAUTICAL TRANSPORT IN REPUBLIC OF CROATIA

In recent years, Republic of Croatia stood out as a desirable tourist destination which is being visited, every year, by more and more foreign tourists. However, nautical tourism stood out as one of the most important tourist products, by which Croatia is trying to position itself better in that market segment.

Through the research, conducted by the Croatian Central Bureau of Statistics, it is evident that the nautical tourism in Croatia stands at a high level. Also, through the research conducted, it is evident that the nautical tourism in Croatia has not yet reached the desired level of quality in accordance with the available resource base, and that the peak of its development is still expected. The said study is being conducted every year, and in continuation of this science research, the data collected from 2008 to 2013 is being presented.

In the year 2013, in Republic of Croatia, there were 106 ports of nautical tourism, with total sea surface of 3,278,064 m². The analysis of nautical tourism in this section include all ports of nautical tourism, and they are classified into 22 anchorages, 13 moorings, 14 dry marinas and 53 marinas, and also four unclassified ports of nautical tourism. By state counties, ports are classified so that in Primorje-Gorski Kotar County there are 32, in Zadar 23, Sibenik-Knin 14, Split-Dalmatia 17, Istria 14 and Dubrovnik-Neretva County 6 ports of nautical tourism. The number of moors in all ports covered was 16,940. In Table 1, the data is presented on the capacity of ports of nautical tourism in 2013, and the number of workers in ports in that year.

Table 1. The capacities of ports of nautical tourism in 2013

<table>
<thead>
<tr>
<th>Sea surface (m²)</th>
<th>3278064</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of moors, total</td>
<td>16940</td>
</tr>
<tr>
<td>of this for vessels in length:</td>
<td></td>
</tr>
<tr>
<td>Up to 6 m</td>
<td>727</td>
</tr>
<tr>
<td>6-8 m</td>
<td>1446</td>
</tr>
<tr>
<td>8-10 m</td>
<td>2900</td>
</tr>
<tr>
<td>10-12 m</td>
<td>4569</td>
</tr>
<tr>
<td>12-15 m</td>
<td>4350</td>
</tr>
<tr>
<td>15-20 m</td>
<td>2322</td>
</tr>
<tr>
<td>over 20 m</td>
<td>626</td>
</tr>
<tr>
<td>Length of shoreline for mooring (m)</td>
<td>63110</td>
</tr>
<tr>
<td>Number of places for accommodation of vessels on land</td>
<td>5473</td>
</tr>
<tr>
<td>The total area of land (m²)</td>
<td>799822</td>
</tr>
<tr>
<td>of this the covered area (m²)</td>
<td>8876</td>
</tr>
<tr>
<td>Number of employees, total</td>
<td>1387</td>
</tr>
<tr>
<td>of this seasonal</td>
<td>264</td>
</tr>
</tbody>
</table>

Source: http://www.dzs.hr/ (accessed 03.07.2014.)

The total number of moors in 2013 in ports of nautical tourism in Croatia, according to Table 1, was 16,940, while the space for the storage on land was 5,473 in total. The moorings were used the most by boats in the length of 10 to 12 meters, and 12 to 15 meters. Furthermore, the number of employees in 2013 was 1,387. Of that there were 264 seasonal workers. With regard to the data from previous years, shown in Table 2, it is evident that the number of employees in nautical tourism grew gradually, which indicates a continuous positive development of this branch of the economy. In Table 2, the data is also presented on the number of moors and length of shoreline mooring, collected from 2008 to 2012.
Table 2. The capacities of ports of nautical tourism from 2008 to 2012

<table>
<thead>
<tr>
<th></th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of moors, total</td>
<td>16403</td>
<td>16848</td>
<td>16913</td>
<td>17059</td>
<td>17454</td>
</tr>
<tr>
<td>of this for vessels in length:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>up to 6 m</td>
<td>1054</td>
<td>1184</td>
<td>1239</td>
<td>1074</td>
<td>913</td>
</tr>
<tr>
<td>6-8 m</td>
<td>2128</td>
<td>2136</td>
<td>2097</td>
<td>1470</td>
<td>1385</td>
</tr>
<tr>
<td>8-10 m</td>
<td>3602</td>
<td>3578</td>
<td>3542</td>
<td>2905</td>
<td>2932</td>
</tr>
<tr>
<td>10-12 m</td>
<td>4532</td>
<td>4636</td>
<td>4618</td>
<td>4332</td>
<td>4741</td>
</tr>
<tr>
<td>12-15 m</td>
<td>3059</td>
<td>3191</td>
<td>3242</td>
<td>4382</td>
<td>4498</td>
</tr>
<tr>
<td>15-20 m</td>
<td>1514</td>
<td>1512</td>
<td>1577</td>
<td>2243</td>
<td>2282</td>
</tr>
<tr>
<td>over 20 m</td>
<td>514</td>
<td>610</td>
<td>616</td>
<td>653</td>
<td>703</td>
</tr>
<tr>
<td>Length of shoreline for mooring, m</td>
<td>66038</td>
<td>63824</td>
<td>64715</td>
<td>64345</td>
<td>58634</td>
</tr>
<tr>
<td>Number of employees, total</td>
<td>1283</td>
<td>1319</td>
<td>1327</td>
<td>1328</td>
<td>1347</td>
</tr>
<tr>
<td>of this seasonal</td>
<td>224</td>
<td>249</td>
<td>242</td>
<td>272</td>
<td>261</td>
</tr>
</tbody>
</table>

Source: http://www.dzs.hr/ (accessed 03.07.2014.)

As shown in the previous table, the total number of moors from 2008 to 2012 has been steadily increasing, and the largest was in 2012 when it stood at 17,454 moors, 514 moorings more than in 2013. The moors were mostly used by vessels from 10 to 12 meters, and 12 to 15 meters in length, and this figure had not changed even in 2013. However, the length of shoreline for mooring varied over the past 5 years. So, the longest developed shoreline for mooring was in 2008, and the shortest in 2012, when the total number of moors was the greatest. This suggests that the further development of nautical tourism is being encouraged by the reconstruction of existing ports, on an existing infrastructure as the basis, in order to protect and preserve natural surfaces. Furthermore, Table 3 shows the vessels that were at a constant mooring, in the period from 2008 to 2013, according to the vessel ensign. Vessels are motor yachts, sailboats and other.

Table 3. The number of vessels at constant mooring from 2008 to 2013 according to the vessel ensign

<table>
<thead>
<tr>
<th></th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
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<td>Austria</td>
<td>2274</td>
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<td>2305</td>
<td>2211</td>
<td>2283</td>
<td>2043</td>
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<td>Belgium</td>
<td>123</td>
<td>47</td>
<td>42</td>
<td>38</td>
<td>44</td>
<td>51</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>166</td>
<td>191</td>
<td>183</td>
<td>181</td>
<td>177</td>
<td>142</td>
</tr>
<tr>
<td>Finland</td>
<td>7</td>
<td>6</td>
<td>17</td>
<td>10</td>
<td>21</td>
<td>11</td>
</tr>
<tr>
<td>France</td>
<td>108</td>
<td>113</td>
<td>113</td>
<td>101</td>
<td>105</td>
<td>87</td>
</tr>
<tr>
<td>Croatia</td>
<td>4527</td>
<td>4710</td>
<td>4495</td>
<td>4126</td>
<td>3902</td>
<td>4456</td>
</tr>
<tr>
<td>Italy</td>
<td>642</td>
<td>641</td>
<td>669</td>
<td>675</td>
<td>754</td>
<td>694</td>
</tr>
<tr>
<td>Israel</td>
<td>3</td>
<td>6</td>
<td>3</td>
<td>3</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Hungary</td>
<td>270</td>
<td>259</td>
<td>234</td>
<td>192</td>
<td>182</td>
<td>149</td>
</tr>
<tr>
<td>Netherlands</td>
<td>98</td>
<td>99</td>
<td>86</td>
<td>105</td>
<td>126</td>
<td>136</td>
</tr>
<tr>
<td>Norway</td>
<td>12</td>
<td>106</td>
<td>14</td>
<td>16</td>
<td>26</td>
<td>28</td>
</tr>
<tr>
<td>Germany</td>
<td>2171</td>
<td>1882</td>
<td>1933</td>
<td>1960</td>
<td>2033</td>
<td>1862</td>
</tr>
<tr>
<td>Poland</td>
<td>56</td>
<td>66</td>
<td>70</td>
<td>81</td>
<td>83</td>
<td>88</td>
</tr>
<tr>
<td>Russia</td>
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<td>5</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>USA</td>
<td>779</td>
<td>815</td>
<td>839</td>
<td>819</td>
<td>786</td>
<td>344</td>
</tr>
<tr>
<td>Slovakia</td>
<td>108</td>
<td>124</td>
<td>117</td>
<td>127</td>
<td>156</td>
<td>156</td>
</tr>
<tr>
<td>Slovenia</td>
<td>724</td>
<td>743</td>
<td>761</td>
<td>768</td>
<td>812</td>
<td>640</td>
</tr>
<tr>
<td>Sweden</td>
<td>41</td>
<td>50</td>
<td>66</td>
<td>70</td>
<td>48</td>
<td>42</td>
</tr>
<tr>
<td>Switzerland</td>
<td>78</td>
<td>70</td>
<td>71</td>
<td>79</td>
<td>74</td>
<td>75</td>
</tr>
<tr>
<td>UK</td>
<td>374</td>
<td>371</td>
<td>363</td>
<td>374</td>
<td>383</td>
<td>320</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>14665</strong></td>
<td><strong>14801</strong></td>
<td><strong>14431</strong></td>
<td><strong>14286</strong></td>
<td><strong>14396</strong></td>
<td><strong>13735</strong></td>
</tr>
</tbody>
</table>

Source: http://www.dzs.hr/ (accessed 03.07.2014.)
It is evident that in 2013, at constant mooring, was 13,735 vessels, which is 4.6% less than in 2012. The biggest number of vessels on constant mooring, in the period from 2008 to 2013, was in 2009, when the number of vessels on continuous mooring was 14,801. According to the type of vessel, in that particular time, the moors at sea were mostly used by sailboats 48.3%, followed by motor yachts 47.6%, and 4.1% other vessels. According to the vessel ensign, vessels from Croatia, Austria, Germany, Italy, Slovenia and the United States accounted for 86.5% of the total number of vessels, on constant mooring, from 2008 to 2013. From this table it is evident that the number of vessels, on constant mooring, through a period of 5 years, has marked a negative and a positive trend. However, it is important to realize that, according to the data from 2013, there has been a decrease in vessels, which indicates the significant impact of economic crisis on nautical tourism in Croatia. The following table presents data on the number of vessels on a constant mooring, according to the length of the vessel, from 2008 to 2013.

<table>
<thead>
<tr>
<th>Type</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>up to 6 m</td>
<td>574</td>
<td>569</td>
<td>614</td>
<td>563</td>
<td>178</td>
<td>198</td>
</tr>
<tr>
<td>6-8 m</td>
<td>1453</td>
<td>1323</td>
<td>1323</td>
<td>1120</td>
<td>933</td>
<td>858</td>
</tr>
<tr>
<td>8-10 m</td>
<td>2937</td>
<td>2791</td>
<td>2642</td>
<td>2395</td>
<td>2459</td>
<td>2167</td>
</tr>
<tr>
<td>10-12 m</td>
<td>3738</td>
<td>3776</td>
<td>3544</td>
<td>3582</td>
<td>3754</td>
<td>3393</td>
</tr>
<tr>
<td>12-15 m</td>
<td>2998</td>
<td>3158</td>
<td>3228</td>
<td>3169</td>
<td>3478</td>
<td>3485</td>
</tr>
<tr>
<td>15-20 m</td>
<td>908</td>
<td>980</td>
<td>1011</td>
<td>1071</td>
<td>1135</td>
<td>1160</td>
</tr>
<tr>
<td>over 20 m</td>
<td>200</td>
<td>281</td>
<td>299</td>
<td>308</td>
<td>365</td>
<td>344</td>
</tr>
</tbody>
</table>

Source: http://www.dzs.hr/ (accessed 03.07.2014.)

At constant mooring, vessels in length from 10 to 12, and 12 to 15 meters, prevailed through all of 5 said years. The occupancy of moors was largest in the summer months, when the trend of tourist arrivals, in Croatia, is also the greatest. However, in recent years, there had been more and more vessels at moors, during the preseason, which, of course, has a positive effect on business activities of the nautical tourism. Furthermore, vessels in transit also form the structure of ports of nautical tourism.

Table 5. The number of vessels in transit from 2008 to 2013 according to the vessel ensign

<table>
<thead>
<tr>
<th>Country</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>18 199</td>
<td>16 155</td>
<td>15 037</td>
<td>14 929</td>
<td>13 400</td>
<td>13 438</td>
</tr>
<tr>
<td>Belgium</td>
<td>761</td>
<td>573</td>
<td>618</td>
<td>597</td>
<td>833</td>
<td>901</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>1 812</td>
<td>1 667</td>
<td>1 550</td>
<td>1 482</td>
<td>1 085</td>
<td>1 034</td>
</tr>
<tr>
<td>Finland</td>
<td>119</td>
<td>120</td>
<td>82</td>
<td>118</td>
<td>129</td>
<td>201</td>
</tr>
<tr>
<td>France</td>
<td>2 702</td>
<td>2 581</td>
<td>2 860</td>
<td>2 373</td>
<td>2 324</td>
<td>2 109</td>
</tr>
<tr>
<td>Greece</td>
<td>122</td>
<td>152</td>
<td>139</td>
<td>109</td>
<td>89</td>
<td>207</td>
</tr>
<tr>
<td>Croatia</td>
<td>86 303</td>
<td>78 084</td>
<td>83 795</td>
<td>76 329</td>
<td>81 571</td>
<td>84 668</td>
</tr>
<tr>
<td>Italy</td>
<td>47 000</td>
<td>46 018</td>
<td>45 740</td>
<td>40 168</td>
<td>32 454</td>
<td>30 935</td>
</tr>
<tr>
<td>Israel</td>
<td>102</td>
<td>53</td>
<td>97</td>
<td>36</td>
<td>50</td>
<td>42</td>
</tr>
<tr>
<td>Hungary</td>
<td>1 535</td>
<td>1 656</td>
<td>1 303</td>
<td>1 810</td>
<td>1 627</td>
<td>1 416</td>
</tr>
<tr>
<td>Netherlands</td>
<td>1 690</td>
<td>1 846</td>
<td>1 933</td>
<td>1 662</td>
<td>1 576</td>
<td>1 671</td>
</tr>
<tr>
<td>Norway</td>
<td>227</td>
<td>1 522</td>
<td>295</td>
<td>316</td>
<td>399</td>
<td>342</td>
</tr>
<tr>
<td>Germany</td>
<td>24 625</td>
<td>22 540</td>
<td>21 268</td>
<td>20 680</td>
<td>20 276</td>
<td>20 947</td>
</tr>
<tr>
<td>Poland</td>
<td>905</td>
<td>892</td>
<td>846</td>
<td>1 033</td>
<td>874</td>
<td>1 035</td>
</tr>
<tr>
<td>Russia</td>
<td>109</td>
<td>117</td>
<td>244</td>
<td>184</td>
<td>87</td>
<td>136</td>
</tr>
<tr>
<td>USA</td>
<td>4 077</td>
<td>3 888</td>
<td>3 941</td>
<td>3 873</td>
<td>2 986</td>
<td>2 085</td>
</tr>
<tr>
<td>Slovakia</td>
<td>830</td>
<td>955</td>
<td>882</td>
<td>824</td>
<td>791</td>
<td>798</td>
</tr>
<tr>
<td>Slovenia</td>
<td>10 623</td>
<td>10 368</td>
<td>9 660</td>
<td>7 640</td>
<td>6 671</td>
<td>6 772</td>
</tr>
<tr>
<td>Sweden</td>
<td>608</td>
<td>589</td>
<td>644</td>
<td>546</td>
<td>592</td>
<td>547</td>
</tr>
<tr>
<td>Switzerland</td>
<td>936</td>
<td>808</td>
<td>803</td>
<td>804</td>
<td>861</td>
<td>746</td>
</tr>
<tr>
<td>UK</td>
<td>4 058</td>
<td>3 242</td>
<td>3 544</td>
<td>3 067</td>
<td>3 447</td>
<td>3465</td>
</tr>
</tbody>
</table>

Source: http://www.dzs.hr/ (accessed 03.07.2014.)
According to Table 5, the highest number of vessels in transit was recorded in 2008, and it amounted to 217,024 vessels. After 2008 there was a decrease of vessels in transit, and even in 2013 it had not reached the numbers from 2008. This decrease is a result of the global crisis, which affected the economy of the entire world, in a period from 2009 to 2011. However, the year 2013 showed a slight growth of 0.7%, which was more than the previous 2012. Amongst the ensigns of vessels in transit, the dominant countries were Croatia, Italy, Germany, Austria and Slovenia, and thus consisted 88% of the total number of vessels in transit.

Table 6. The number of vessels in transit according to the type and length of the vessel

<table>
<thead>
<tr>
<th>Type</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>up to 6 m</td>
<td>5 663</td>
<td>5 154</td>
<td>5 189</td>
<td>4 831</td>
<td>3 696</td>
<td>3547</td>
</tr>
<tr>
<td>6-8 m</td>
<td>18 553</td>
<td>16 049</td>
<td>15 731</td>
<td>15 404</td>
<td>12 874</td>
<td>12800</td>
</tr>
<tr>
<td>8-10 m</td>
<td>36 986</td>
<td>34 884</td>
<td>32 506</td>
<td>30 429</td>
<td>28 358</td>
<td>27939</td>
</tr>
<tr>
<td>10-12 m</td>
<td>68 363</td>
<td>66 760</td>
<td>68 029</td>
<td>58 889</td>
<td>56 066</td>
<td>55782</td>
</tr>
<tr>
<td>12-15 m</td>
<td>64 001</td>
<td>58 050</td>
<td>59 744</td>
<td>57 535</td>
<td>58 449</td>
<td>59206</td>
</tr>
<tr>
<td>15-20 m</td>
<td>13 753</td>
<td>13 389</td>
<td>14 367</td>
<td>11 759</td>
<td>12 957</td>
<td>13669</td>
</tr>
<tr>
<td>over 20 m</td>
<td>3 530</td>
<td>3 529</td>
<td>3 422</td>
<td>3 590</td>
<td>3 630</td>
<td>4311</td>
</tr>
</tbody>
</table>

Of all the vessels in transit, the dominant ones were also from 10 to 12 meters in length, and from 12 to 15 meters. Vessels up to 6 meters and over 20 meters were in minority.

The business activity of ports of nautical tourism can best be judged by their generated income. In 2013, it amounted to 686.7 million kunas. Compared to the year 2012, the generated income increased by 4%, and its structure is shown in Graph 1.

Graph 1. The structure of generated income of ports of nautical tourism in 2013

The structure of the generated income of nautical ports, consists of the rental of permanent and transit moors, services and other incomes. In 2013, the profit of 504.7 million kunas was made by renting moorings, which amounts to 74% of total income, and it is 3.5% higher than the income generated in 2012. The income from the rental of permanent moorings was 403,887 kunas, while of those in transit was 100,859 kunas. The income from service was 48,974 kunas, and other income was 132,940 kunas. Graph 2 is showing the generated income of nautical ports from 2008 to 2012, in order to analyze and compare more accurately, the business actions of ports of nautical tourism, in the period of the last 5 years.

The structure of the generated income of nautical ports, consists of the rental of permanent and transit moors, services and other incomes. In 2013, the profit of 504.7 million kunas was made by renting moorings, which amounts to 74% of total income, and it is 3.5% higher than the income generated in 2012. The income from the rental of permanent moorings was 403,887 kunas, while of those in transit was 100,859 kunas. The income from service was 48,974 kunas, and other income was 132,940 kunas. Graph 2 is showing the generated income of nautical ports from 2008 to 2012, in order to analyze and compare more accurately, the business actions of ports of nautical tourism, in the period of the last 5 years.
Graph 2. The generated income of ports of nautical tourism from 2008 to 2012 in millions of kunas

![Graph showing income from 2008 to 2012](image)

Source: Prepared by the authors according to the data from the Central Bureau of Statistics

The income, generated by ports of nautical tourism in the period from 2008 to 2012, is constantly increasing. By 2013, the generated income grew by nearly 200 million, which confirms very good business actions of nautical ports, and the overall positive development of nautical tourism in Croatia.

### 3. ASSESSMENT OF THE CURRENT STATE OF NAUTICAL TOURISM

Nautical tourism is one of the most promising industries that continuous to record high growth rates. Previous analysis shows that the demand for nautical tourism in Croatia exists, and that it brings out many positive socio-economic effects. This can be recognized, to the satisfaction of boaters, in nautical tourism offers in Croatia, which have been researched by the journal “TOMAS Nautika Jahting” in 2012, and are shown in the following table.

#### Table 7. The satisfaction of boaters with the offer

<table>
<thead>
<tr>
<th>RANK</th>
<th>ELEMENTS OF THE OFFER</th>
<th>% of satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>The beauty of nature and landscape</td>
<td>94,5</td>
</tr>
<tr>
<td>2.</td>
<td>Personal safety</td>
<td>86,2</td>
</tr>
<tr>
<td>3.</td>
<td>Condition of the boat (working order, arrangement, equipment and the like)</td>
<td>78,9</td>
</tr>
<tr>
<td>4.</td>
<td>Courtesy of staff at marines</td>
<td>78,7</td>
</tr>
<tr>
<td>5.</td>
<td>Reception at the marina</td>
<td>78,6</td>
</tr>
<tr>
<td>6.</td>
<td>The richness of gastronomic offer at destinations</td>
<td>77,2</td>
</tr>
<tr>
<td>7.</td>
<td>Traffic access of the port of departure</td>
<td>75,7</td>
</tr>
<tr>
<td>8.</td>
<td>Spatial distribution of marinas</td>
<td>75,6</td>
</tr>
<tr>
<td>9.</td>
<td>Water supply (cold and hot) at marinas</td>
<td>75,2</td>
</tr>
<tr>
<td>10.</td>
<td>Availability of connections for water and electricity at marinas</td>
<td>74,3</td>
</tr>
<tr>
<td>11.</td>
<td>Availability of information at marinas about touristic offers of destinations</td>
<td>74,1</td>
</tr>
<tr>
<td>12.</td>
<td>Admission at the airport (transfer)</td>
<td>73,3</td>
</tr>
<tr>
<td>13.</td>
<td>Overall offer for boaters</td>
<td>71,0</td>
</tr>
<tr>
<td>14.</td>
<td>Neatness and cleanliness of the environment at marinas</td>
<td>70,4</td>
</tr>
<tr>
<td>15.</td>
<td>Moors (width, funcionality)</td>
<td>68,9</td>
</tr>
<tr>
<td>16.</td>
<td>‘Value for money’ of overall offer for boaters</td>
<td>67,1</td>
</tr>
<tr>
<td>17.</td>
<td>The variety of cultural events</td>
<td>66,2</td>
</tr>
</tbody>
</table>
18. The quality of catering services at marinas 65,9
19. Supply on vessels (welcome drink, food, TV, internet access, etc.) 65,9
20. Shopping options at destinations 65,6
21. The quality of technical service (repair rate) at marinas 64,9
22. Variety of entertainment 64,2
23. Sanitary facilities at marinas 62,2
24. The abundance of sports activities at destinations 60,8
25. Buying options at marinas 49,3

Source: Institute for Tourism, ATTITUDES AND CONSUMPTION OF BOATERS IN CROATIA, TOMAS NAUTIKA JAHTING 2012, Zagreb

It is noticeable that boaters are mostly satisfied with elements of the offer. This primarily refers to the beauty of nature and landscape, to marinas’ offer, helpfulness of the staff and basic services, to the availability of information in marinas, and neatness of the environment. They also expressed satisfaction with the gastronomic offer at destinations, transport availability of the port of departure and the layout of the marina, as well as the overall offer for boaters. Yet boaters were dissatisfied with buying options (offer and price) in marinas, which refers to insufficient equipment of marinas in order to meet the boaters’ needs.

Regardless of the very successful business activity of nautical ports in 2013, nautical tourism in Croatia still has much room for improvement. Croatian accession to the European Union is one of the advantages that can be used to put an end to an uncontrolled and undeveloped growth of nautical tourism, and also set the strategy for a long-term preservation of its quality. It is necessary to establish an organization of nautical port in such a way to enable the provision of basic and complementary services. The current stage of development of nautical tourism in Croatia, involves offers of mooring services and basic services during the boaters stay, which is only an initial step in providing a range of other services, such as souvenirs, newspapers and publications sales, exchange services, sales of goods in supermarkets, vessels renting, training in sailing, diving, sports fishing and the like, servicing and repairs of boats, sports equipment, weather and other information which are related to the weather and overall safety of the sailing, health services, organization of socio-cultural events and more. It is important to note that services in marinas are used by the tourists of greater purchasing power, so the offer should be richer and better.

The assessment of the current state of nautical tourism in Croatia, and the current state of the nautical infrastructure, and overall offer, intended for boaters, suggests that there is a need for improvement, adaptation and repositioning of the marketing, so that the development goes in line with global trends, and existing international competition.

4. THE IMPACT OF NAUTICAL TOURISM ON DEVELOPMENT

A characteristic that distinguishes nautical tourism from any other kind, is the propulsion, a characteristic that represents this type of tourism as a certain form of recreation. It represents a new kind of socio-economic phenomenon that, with its effects, contributes to the richer and more comprehensive quality of life and urbanization, and also the development of gravitating destination, in the same way that the gravitating destination itself contributes to the development of nautical tourism. The consumption of boaters, especially those from abroad, creates many direct and indirect effects on individual economic entities, nautical destination and the country’s economy as a whole. As a consequence of that, marinas also generate a higher rate of return on the capital invested in their construction, than that invested in any other type of tourism.

Ports of nautical tourism are the most important part of the nautical offer, and their significance for the economic development of local communities, and the region, has raised the local and regional government to a higher level of interest. In fact, they are carriers of development and are basic infrastructural objects, in the system of nautical tourism, in a certain area. Also, nautical port is a complex system, in which the investment, construction and functionality are very important, so it should, therefore, be rationally designed and optimally valorized, for the area in which it is located. When they are established at locations that are relatively underdeveloped, ports of nautical tourism, and also nautical tourism itself, take on the role of movers of local growth, in developing its products and services to the highest level of quality. Also, builders, shipbuilders and other participants, have an indirect effect, due to the sale of their services, or products, via catering or merchant services, to boaters.

When nautical tourism is considered from a social point of view, it gives its contribution by transferring various information, knowledge, cultures and lifestyles, which could also indirectly affect the social development of the destination, and the

1 Lukovic T., Bilic M. (2007), PORTS OF NAUTICAL TOURISM IN CROATIA AND STRATEGY OF LOCAL DEVELOPMENT, Our sea, No. 54, p. 121
environment, in which it is located. Its influence on the general development of a destination in the social sense, is particularly reflected in the interest, and then also in the education, of young people, as well as employment boost. Effects of nautical tourism are largely evident in regional development, attracting the private capital, the development of small businesses, investing in infrastructure, and also in an efficient use of resources by developing tertiary and quarterly businesses, in the destination in which it gravitates.  

The most important feature of nautical tourism, in the framework of its impact on local and national economy, is its multiplier effect. This involves the movement of funds of nautical spending, through the economy, spilling over from one branch to the next. Financial resources of nautical tourism, in this manner, are causing a huge economic impact, not lingering in the place of their consumption, and are effecting future economic developments. The achieved progress then causes the creation of funds for the purchase of boats and leisure time for sailing, which is the fundamental premise of further naval demand. The influence of the development of nautical tourism on the destination is evident through generated income of ports of nautical tourism, in a particular region or county. These data are shown in the following table.

Table 8. The generated income of ports of nautical tourism through counties from 2011 to 2013 in thousands of kunas

<table>
<thead>
<tr>
<th>County</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Primorje – Gorski Kotar County</strong></td>
<td>94 881</td>
<td>99 019</td>
<td>97 724</td>
</tr>
<tr>
<td>Renting of moors</td>
<td>70 906</td>
<td>73 779</td>
<td>72 956</td>
</tr>
<tr>
<td>Permanent</td>
<td>61 749</td>
<td>63 913</td>
<td>62 997</td>
</tr>
<tr>
<td>Transit</td>
<td>9 157</td>
<td>9 866</td>
<td>9 959</td>
</tr>
<tr>
<td>Service</td>
<td>5 757</td>
<td>5 835</td>
<td>5 299</td>
</tr>
<tr>
<td>Other incomes</td>
<td>18 218</td>
<td>19 405</td>
<td>19 469</td>
</tr>
<tr>
<td><strong>Zadar County</strong></td>
<td>137 731</td>
<td>141 689</td>
<td>143 627</td>
</tr>
<tr>
<td>Renting of moors</td>
<td>101 657</td>
<td>105 256</td>
<td>108 410</td>
</tr>
<tr>
<td>Permanent</td>
<td>90 675</td>
<td>94 696</td>
<td>96 565</td>
</tr>
<tr>
<td>Transit</td>
<td>10 982</td>
<td>10 560</td>
<td>11 845</td>
</tr>
<tr>
<td>Service</td>
<td>12 112</td>
<td>9 057</td>
<td>9 187</td>
</tr>
<tr>
<td>Other incomes</td>
<td>23 962</td>
<td>27 376</td>
<td>26 030</td>
</tr>
<tr>
<td><strong>Sibenik-Knin County</strong></td>
<td>139 849</td>
<td>163 603</td>
<td>191 807</td>
</tr>
<tr>
<td>Renting of moors</td>
<td>87 187</td>
<td>107 593</td>
<td>121 547</td>
</tr>
<tr>
<td>Permanent</td>
<td>69 246</td>
<td>88 909</td>
<td>100 033</td>
</tr>
<tr>
<td>Transit</td>
<td>17 941</td>
<td>18 684</td>
<td>21 514</td>
</tr>
<tr>
<td>Service</td>
<td>16 187</td>
<td>14 250</td>
<td>19 276</td>
</tr>
<tr>
<td>Other incomes</td>
<td>36 475</td>
<td>41 760</td>
<td>50 984</td>
</tr>
<tr>
<td><strong>Split-Dalmatia County</strong></td>
<td>86 666</td>
<td>100 951</td>
<td>102 730</td>
</tr>
<tr>
<td>Renting of moors</td>
<td>68 500</td>
<td>79 283</td>
<td>81 403</td>
</tr>
<tr>
<td>Permanent</td>
<td>43 376</td>
<td>51 456</td>
<td>50 873</td>
</tr>
<tr>
<td>Transit</td>
<td>25 124</td>
<td>27 827</td>
<td>30 530</td>
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<tr>
<td>Service</td>
<td>8 896</td>
<td>8 586</td>
<td>5 708</td>
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<tr>
<td>Other incomes</td>
<td>9 270</td>
<td>13 082</td>
<td>15 619</td>
</tr>
<tr>
<td><strong>Istra County</strong></td>
<td>108 677</td>
<td>120 825</td>
<td>115 846</td>
</tr>
<tr>
<td>Renting of moors</td>
<td>88 633</td>
<td>97 619</td>
<td>94 491</td>
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<tr>
<td>Permanent</td>
<td>73 050</td>
<td>81 678</td>
<td>80 263</td>
</tr>
<tr>
<td>Transit</td>
<td>15 583</td>
<td>15 941</td>
<td>14 228</td>
</tr>
<tr>
<td>Service</td>
<td>8 793</td>
<td>8 860</td>
<td>6 409</td>
</tr>
<tr>
<td>Other incomes</td>
<td>11 251</td>
<td>14 346</td>
<td>14 946</td>
</tr>
</tbody>
</table>

2 Favro S., Kovacic M. (2010), NAUTICAL TOURISM AND PORTS OF NAUTICAL TOURISM, Spatial characteristics of the Croatian Adriatic and choice of location for ports of nautical tourism, Split
The income of ports of nautical tourism, generated from 2011 to 2013, was the highest in Sibenik-Knin County. The income in 2013 amounted to 191 million kunas, and was 17.2% higher than the income generated in 2012. This county has the most developed and the largest marinas on the Adriatic coast, which makes it one of the most profitable nautical-tourist regions in Croatia. After the Sibenik-Knin County, the Zadar County follows, with the income of 143 million kunas in 2013, followed by Istria County, with 115 million kunas of income. Finally there are Split-Dalmatia County with 102 million kunas, Primorje-Gorski Kotar County with 97 million and Dubrovnik-Neretva County with 34 million kunas of income in 2013. In the period from 2011 to 2013, counties that had constant income growth are Sibenik-Knin County, Zadar County, Dubrovnik-Neretva County and Split-Dalmatia County. Primorje-Gorski Kotar County and Istria County recorded a negative trend in their income in 2013, which indicates the need for improvement of the nautical offer in Croatian tourist areas.

The success of a nautical destination, and its offers, ultimately depends on an assessment of those to whom it is intended for i.e. it depends on fulfilling the needs and desires of boaters. In 2012, the expenditures of boaters made in marinas, ports and destinations, during their travels, i.e. sailing, were in an average 393 euros per person, which is 31% of total traveling or sailing expenses.

By observing nautical tourism, in terms of economic activity, its sole purpose is in attracting nautical tourists, and their satisfaction as consumers. In order to maintain that purpose, it is necessary to eliminate all deficiencies in the system and its functions, with regard to its users. It is, therefore, necessary to devote greater attention to planning and complex nautical construction, in order for the nautical destination and port to be better involved in the trends of modern, compatible, complex and sustainable development.

5. CONCLUSION

By analyzing the nautical traffic, the authors, in this scientific work, confirmed the fact that the development of nautical tourism in Croatia is on the rise for years. With the influx of more and more foreign tourists, to boaters, there is a broader picture of nautical tourism in Croatia, as one of the most promising activities that can, in the future, become the basis for the development of the entire Croatian economy. However, evaluation of the state of nautical tourism reveals that its development is still not in proportion with its potential. The reasons for that are poor offer and uncompetitive rates of nautical-tourist services, the lack of modern technology in the making of vessels and equipment intended for marine tourism, complicated administrative processes, neglect of nautical tourism in inland waters, and finally, an insufficient number of moors for vessels in marinas.

In order to completely eradicate these negative sides of nautical tourism, it is recommended to devise the inclusion of touristic location and nautical ports in trends of modern development, cultivate environmental culture, successfully monitor the natural system, and burden the space within reasonable bounds. Also, it is necessary to increase carrying capacities by either reconstructing, or rehabilitating the existing ports, strengthen the competitiveness of all subjects of nautical tourism, apply new technologies and environmental standards, and finally, establish a constant education of participants in this branch of tourism. An important factor in the development and improvement of nautical tourism are natural conditions and material basis, resources, and ongoing investment construction.

Furthermore, through this research paper, the authors confirmed the hypothesis, that the development of nautical tourism impacts the economical and social structure of the destination in which it is located, and so it takes the place of the leader of its economic growth. However, the destination must have a well-designed development plan, in order to lay good foundations for further development of nautical tourism. Creating its development and its impact on the destination, poses a great challenge for planners, at the system level, and responsibility to the entire social community. That is why each destination should have a plan for the development of nautical tourism, within the available spatial, human and technical resources, ensure the continuity for the local population in the economic and social surroundings, and the physical environment, and achieve harmonization in attitudes of all participants of the formation of nautical services at the professional level of development of nautical tourism.

Source: http://www.dzs.hr/ (accessed 03.07.2014.)

4 Institute for Tourism, ATTITUDES AND CONSUMPTION OF BOATERS IN CROATIA, TOMAS NAUTIKA JAHTING 2012, Zagreb

<table>
<thead>
<tr>
<th>County</th>
<th>Renting of moors</th>
<th>Permanent</th>
<th>Transit</th>
<th>Service</th>
<th>Other incomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dubrovnik-Neretva County</td>
<td>22 552</td>
<td>11 364</td>
<td>11 188</td>
<td>5 194</td>
<td>4 675</td>
</tr>
<tr>
<td>Dubrovnik-Neretva County</td>
<td>24 246</td>
<td>12 355</td>
<td>11 891</td>
<td>4 314</td>
<td>5 343</td>
</tr>
<tr>
<td>Dubrovnik-Neretva County</td>
<td>25 939</td>
<td>13 156</td>
<td>12 783</td>
<td>3 095</td>
<td>5 892</td>
</tr>
</tbody>
</table>
In conclusion, the fulfillment of the basic objective of development of nautical tourism, sustainable by the use and management of resources, also means its positive development and the fulfillment of all the requirements and needs of users, and also the preservation of natural resources, in order to form original, competitive advantages of the specific area.

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FOR ALL AUTHORS:
UNIVERSITY OF RIJEKA, FACULTY OF MARITIME STUDIES RIJEKA, CROATIA
THE ANALYSIS OF THE COMPETITIVENESS OF THE REPUBLIC OF CROATIA
ZRINKA LACKOVIĆ VINCEK
STJEPAN DVORSKI
VLADIMIR KOVŠCA

ABSTRACT
The purpose of this paper is to describe and explain the method and the importance of measuring and determining the competitiveness of national economies. This paper will present the situation of Croatian competitiveness compared to other European countries. The goal is to determine areas in which Republic of Croatia lags most and in which areas are potentials for development and increase of competitiveness. The great importance for small economies are their degree of openness, therefore the participation in international trade. As the national economy is more open and with the increase of the level of imports and exports, it is more foreign competition in the domestic market, which leads to higher inflows of innovation. Also, domestic enterprises are being forced to introduce new technologies and modern achievements in their business in order to remain competitive, which raises the level of the competitiveness of the entire national economy. The growth of the competitiveness of a country has multiple effects on its economic growth and development. According to analyzed indicators of competitiveness (the global competitiveness index and the human development index) it’s encouraging that position of Republic of Croatia in relation to comparable countries is generally improving. However, changes are needed in the area of labor market reforms, macroeconomic environment, a stronger stimulation of foreign investment, education, and innovation and new technologies should become priorities to government and business policy. For the Republic of Croatia, as economically small country, the growth of competitiveness is of a great importance, because this helps not only faster economic growth and new employment, but also indirectly reduce poverty, social inequality and increase social inclusion of population.

KEY WORDS: competitiveness, Republic of Croatia, indices measuring competitiveness.

1. INTRODUCTION
The concept of competitiveness of countries is emphasized through the expansion of the processes of globalization, integration and liberalization, since these lead to various changes in the shape of technological progress, development of new methods of communication and reduction of the obstacles in the international exchange. The traditional approach to the competitiveness is the aggressive method in the international market, either through the aggressive export, or through international direct investments, which results in the increased flow of assets into the country, but does not influence the employment rate. On the other hand, the new approaches emphasize the importance of creating of the incentives to increase the attractiveness of a country for the international investors, since the entry of new, international investors creates new jobs in the host country, which has a positive influence on the total employment rate.

For the small economies, a very important factor is their level of accessibility, i.e. participation in the international exchange. Namely, if the national economy is more accessible, i.e. if it has higher levels of export and import, the international competition in the domestic market is higher, and it leads to increased in-flow of the innovations; at the same time, the domestic companies are forced to introduce new technologies and contemporary methods in their business operations to maintain the competitiveness, which raises the level of competitiveness of the national economy as a whole. The increase of the competitiveness of a country has a multiple impact on its economic growth and development.

This article is divided into five separate chapters. After the introduction, we will define the notion of competitiveness, and establish the index of competitiveness, developed for the needs of measurement of the competitive position of countries. In the third chapter, we will analyze the competitive position of Republic of Croatia and the comparable countries according to the global index of competitiveness, and we will also provide guidelines for the further improvement of this position; in the fourth chapter, we will analyze the competitive position of Republic of Croatia and the comparable countries according to the human development index. In the last chapter, we will provide the basic conclusions of this paper.
2. DEFINITION OF COMPETITIVENESS

According to The World Economic Forum (WEF) the competitiveness is defined as the set of institutions, policies and factors which create the level of productivity of a country (The World Economic Forum – WEF, 2010). With the increased productivity, the citizens of that country achieve higher incomes and higher returns on investments. In studying of the field of competitiveness, it is necessary to use the holistic approach instead of the individual one, since the competitiveness of a nation and the competitiveness of a company are related. A necessary condition for successful competitiveness of a company in the global market is the ensuring of the possibility of opportunity exploitation, creation of the specific advantages and taking the competitive position in the domestic market (Grgić, Bilas, Franc, 2010). According to Garelli (2002), extremely important aspects of competitiveness are education and knowledge, not just products and services. Grgić, Bilas and Franc (2010) state that the main factors of influencing the competitiveness of countries and companies: (1) globalization and internationalization, (2) domestic economy, (3) governmental policies, (4) financial sector, (5) infrastructure, (6) management, (7) knowledge and technology and (8) education and experience. Porter (1990) emphasizes the role of the state and national conditions as the important factors of competitiveness.

In his “diamond” model he explained the four features of national economy which influence the creation of country competitiveness and the companies which operate in that country. These are the factorial conditions (human resources, capital, infrastructure, physical resources), conditions of demand (advanced needs of the customers, the size of the domestic market, number of independent buyers), strategy and structure of competition, and the following and related industries (specialized domestic suppliers, complementary production), which is shown in Figure 1. Beside these four conditions, Porter’s diamond also includes two separate conditions: the general circumstances and the government, and these conditions can improve or deteriorate “the fruitful ground” for the operation of the industrial companies.

Picture 1. Porter’s Diamond Model for the Competitive Advantage of Nations

The competitive position of a country can be viewed as its position on the international market in relation to the position of other countries at the similar level of economical development (Onsel Sahin, 2006). The World Economy Forum and the Institute for Management Development (IMD) issue, at the annual level, publications with the results of measurement of national competitiveness of countries (Onsel Sahin et. al., 2006). These publications are a useful source of information about the position of the countries in the global economy. The World Economy Forum has developed the frame for measurement of the competitiveness called Growth Competitiveness Index which envelops 155 criteria aggregated into eight factors of competitiveness: (1) openness of the economy toward the international commerce and finances, (2) role of the state budget and regulations (3) development of the financial markets, (4) quality of infrastructure (5) quality of technology, (6) quality of business management, (7) flexibility of the work market and (8) quality of legal and political institutions. For calculating the GCI index, the countries can be divided into two groups: economies in which the innovations are pivotal for achieving the growth, and economies which are growing by taking over the technology developed by other countries; this division is based upon the threshold of 15 patents per million citizens. On the other hand, Business Competitiveness Index (BCI) is the indicator of the competitiveness of national economy which measures the possibility of the national prosperity based upon the level of GDP per capita. The life standard of the citizens is better if the productivity of the economy is better. In 2005 the World Economy Forum has developed the Global Competitiveness
Index which unifies the two above mentioned indexes (GCI and BCI), to rank the countries according to competitiveness (Schwab, 2009). Lovrinčević et. al. (2008) have proven that the best estimation of the objective position of the economy of Republic of Croatia is provided by WEF GCI index, which is the most comprehensive index; therefore, this paper will analyze the competitive position of the countries according to that index.

Twelve pillars on which the competitiveness according to WEF is measured are: institutions, infrastructure, macro-economical environment, health and elementary education, higher education and training, efficiency of the goods market, efficiency of the work force market, development of the financial market, level of technological preparedness, size of market, business sofistication and innovations (World Economic Forum, 2013). These pillars are interconnected and form the base of measurements of the competitiveness of the countries. Regarding the various level of country development, the rang of a country in relation to the particular pillar is defined. Global Competitiveness Index differs three groups depending upon the model of their economic growth: countries which base their economic growth upon the supply of the factors, countries which base their economic growth upon the efficiency, and countries in which the economic growth is based upon the innovations (World Economic Forum, 2009).

According to the Institute for development of management, the factors for calculation of the World Competitiveness Index (WCI) for separate countries are divided into four basic groups, which are also the basic factors of competitiveness: economic efficiency, state efficiency, business efficiency and infrastructure.

Human Development Index (HDI) represents the most often used measure of the human development, developed by UN. In the above mentioned index, there are the indicators of the life expectancy, educational achievements and average income, and it is used as the measure of general social and economic education, which is the proof of high correlation of the economic growth with the knowledge and education of the workers.

### 3. COMPETITIVE POSITION OF REPUBLIC OF CROATIA AND COMPARABLE COUNTRIES ACCORDING TO THE GLOBAL COMPETITIVENESS INDEX

World Economy Forum publishes “The Report on Global Competitiveness” for more than 30 years and its combination of “hard” (statistical) and “soft” (questionnaires) data enables the quality envelopment of the wide spectre of factors important for better understanding of the growth determinants. The competitive position of countries was achieved through the combination of publicly available, “hard” data, and the data acquired through the “Research of the manager opinion”, which is, in fact, a comprehensive questionnaire conducted by the World Economy Forum in cooperation with the network of their partner institutes in the countries included into this Report. In the Republic of Croatia, 80 managers of leading Croatian companies and institutions were questioned through the method of sampling.

From the Table 1 it is clear that Swiss still has the leading position on the list of most competitive countries of the world, followed by Singapur, Finland, Germany, USA, Sweden, Hong Kong, Netherlands, Japan and United Kingdom.

Table 1. Global Competitiveness Ranking Index 2009-2013 rankings for top 10 and comparable countries

<table>
<thead>
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<tr>
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<td>41.</td>
<td>41.</td>
<td>39.</td>
<td>46.</td>
</tr>
<tr>
<td>Slovenia</td>
<td>62.</td>
<td>56.</td>
<td>57.</td>
<td>45.</td>
<td>37.</td>
</tr>
</tbody>
</table>
Montenegro  67.  72.  60.  49.  62.
Hungary     63.  60.  48.  52.  58.
Slovak Republic 78.  71.  69.  60.  47.
Romania      76.  78.  77.  67.  64.
Bulgaria     57.  62.  74.  71.  76.
Croatia      75.  81.  76.  77.  72.
Macedonia, FYR 73.  80.  79.  79.  84.
Albania      95.  89.  78.  88.  96.
Serbia       101.  95.  95.  96.  93.
Bosnia and Herzegovina  87.  88.  100.  102.  109.


In the Graph 2, it is visible that some countries of the European Union have suffered a significant decrease of competitiveness, while Bulgaria has achieved a significant improvement. The competitive position of Republic of Croatia increased for 6 positions in relation to 2012, and now it is on 75th place among 148 countries of the world. In such way, the competitive position of Republic of Croatia is equal to the position of Macedonia and Romania. The negative processes in particular countries, like Iran, Morocco, Ukraine and Slovakia, have influenced the movement of Republic of Croatia toward the upper half of the world list of competitiveness, but these positive changes are mostly the result of the reforms related to the membership in the European Union.

Graph 1. Comparison of GCI index of Republic of Croatia and comparable countries in the neighborhood for 2013

Graph 2. Comparison of GCI index of Republic of Croatia and comparable countries in the neighborhood for 2013

![Graph 2](image1)


Republic of Croatia has improved its competitiveness in the following areas: infrastructure, technological readiness, higher education, financial market, business sophistication, and institutions, which is shown on the Graph 3.

Graph 3. Pillars of global competitiveness which have improved in Republic of Croatia

![Graph 3](image2)


The areas in which the competitiveness has decreased and which need the improvement: health and primary education, macro-economic stability, innovation, goods market efficiency and work market efficiency (Graph 4).
Graph 4. Pillars of global competitiveness which have decreased in Republic of Croatia


The factors of positive influence on the total competitive position of Republic of Croatia are, among others, the quality of natural science education, mobile broadband Internet, low rate of infant mortality, number of applied patents, quality of elementary education, quality of roads and total infrastructure, quality of electrical energy supply, rate of organized criminal etc. As the negative factors, there are the costs of agricultural policy, effects of the employment incentives, ability of attracting the investments, legal frame for the foreign investments, efficiency of the legal frame, public spending, protection of the investors, total debt of the state etc.

According to the opinion of the interviewed economy experts in Republic of Croatia, in 2013 the most problematic factors for the business operations in the country are low efficiency of the local administration, unstable policies, corruption, tax rates, restrictive labor laws, access to financing, low business ethics, criminal and frauds etc, which is shown on the Graph 5.

Graph 5. The most problematic factors of doing business in Republic of Croatia in 2013

Note: From the list above, respondents were asked to select the five most problematic for doing business in their country and to rank them between 1 (most problematic) and 5. The bars in the figure show the responses weighted according to their rankings.

From the above mentioned it can be concluded that the trend of the competitive position of Republic of Croatia was changed after five years of decrease. The shift did not happen in the areas pivotal for attracting of the investments. For Republic of Croatia, it is of special importance to focus the attention to the activities which contribute to the increase of the national competitiveness in the international environment, i.e. to increase the efficiency of the public administration and institutions, and the efficiency of the job market, and also to continuously improve the business sophistication. However, the innovation is the key which leads to the right competitiveness. The results of the “Report on global competitiveness 2013 – 2014” show that the countries which encourage the innovativity with the strong institutional frame are developing and find place among the most competitive countries of the world.

For Republic of Croatia, as the country in process of development, it is important to encourage the direct foreign investments, especially greenfield investments, and also to encourage and draw the investments of the domestic companies, since the investment potential of the existing companies is much larger than that of the potential investors.

4. COMPETITIVE POSITION OF REPUBLIC OF CROATIA AND COMPARABLE COUNTRIES ACCORDING TO THE HUMAN DEVELOPMENT INDEX

The value of the Human Development Index above 0,8 is considered to be the indicator of high social development; the value between 0,5 and 0,8 is considered to be the indicator of medium social development, and the value under 0,5 the indicator of low social development. The value of HDI for Republic of Croatia in 2012 is 0,805, which is the category on index of high social development, which places it on 47th place out of 187 observed countries. The Table 2 shows the improvement of Republic of Croatia in each individual HDI indicator. In the period from 1980 to 2012, the life expectancy at birth in Republic of Croatia has increased for 6,3 years.

Table 2. Croatia’s HDI trends between 1980 and 2012

<table>
<thead>
<tr>
<th>Year</th>
<th>Life expectancy at birth</th>
<th>Expected years of schooling</th>
<th>Mean years of schooling</th>
<th>GNI per capita (2005 PPP US$)</th>
<th>HDI value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>70,5</td>
<td></td>
<td>6,9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1985</td>
<td>70,9</td>
<td></td>
<td>7,4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1990</td>
<td>71,9</td>
<td>11,1</td>
<td>7,9</td>
<td>13,283</td>
<td>0,716</td>
</tr>
<tr>
<td>1995</td>
<td>73,6</td>
<td>11,2</td>
<td>8,5</td>
<td>9,919</td>
<td>0,719</td>
</tr>
<tr>
<td>2000</td>
<td>74,8</td>
<td>12,2</td>
<td>9,2</td>
<td>12,140</td>
<td>0,755</td>
</tr>
<tr>
<td>2005</td>
<td>75,4</td>
<td>13,6</td>
<td>9,5</td>
<td>14,930</td>
<td>0,787</td>
</tr>
<tr>
<td>2010</td>
<td>76,5</td>
<td>14,1</td>
<td>9,8</td>
<td>15,579</td>
<td>0,800</td>
</tr>
<tr>
<td>2011</td>
<td>76,6</td>
<td>14,1</td>
<td>9,8</td>
<td>15,597</td>
<td>0,804</td>
</tr>
<tr>
<td>2012</td>
<td>76,8</td>
<td>14,1</td>
<td>9,8</td>
<td>15,419</td>
<td>0,805</td>
</tr>
</tbody>
</table>


According to the Table 2, HDI for Republic of Croatia of 0,805 is under the average of 0,905 for the countries of high social development, and above the averag of 0,771 for the countries of Europe and Central Asia. The countries which are near Republic of Croatia in 2012 according to the position in HDI and population size are Serbia and Bulgaria, which are on 64th and 57th place of HDI respectively.
Table 3. Croatia’s HDI indicators for 2012 relative to selected countries and groups

<table>
<thead>
<tr>
<th>Country</th>
<th>HDI value</th>
<th>HDI rank</th>
<th>Life expectancy at birth</th>
<th>Expected years of schooling</th>
<th>Mean years of schooling</th>
<th>GNI per capita (PPP US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Croatia</td>
<td>0.805</td>
<td>47</td>
<td>76.8</td>
<td>14.1</td>
<td>9.8</td>
<td>15,419</td>
</tr>
<tr>
<td>Serbia</td>
<td>0.769</td>
<td>64</td>
<td>74.7</td>
<td>13.6</td>
<td>10.2</td>
<td>9,533</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>0.782</td>
<td>57</td>
<td>73.6</td>
<td>14.0</td>
<td>10.6</td>
<td>11,474</td>
</tr>
<tr>
<td>Europe and Central Asia</td>
<td>0.771</td>
<td>-</td>
<td>71.5</td>
<td>13.7</td>
<td>10.4</td>
<td>12,243</td>
</tr>
<tr>
<td>Very high HDI</td>
<td>0.905</td>
<td>-</td>
<td>80.1</td>
<td>16.3</td>
<td>11.5</td>
<td>33,391</td>
</tr>
</tbody>
</table>


According to the HDI, Republic of Croatia belongs into the group of very developed countries, which means that the future economic development will not have significant influence on the human development. Until the outbreak of the economic crisis, the differences in Republic of Croatia were not too severe, but the deepening of the crisis has quickened the gap between the classes and the differences between the richest and poorest countries. When this element is added to HDI, the Republic of Croatia is among the last in the region.

5. CONCLUSION

It can be concluded that the trend of competitive position of Republic of Croatia has changed after five years of decrease. The shift did not happen in the areas pivotal for attracting of the investments. For Republic of Croatia, it is of special importance to focus the attention to the activities which contribute to the increase of the national competitiveness in the international environment, i.e. to increase the efficiency of the public administration and institutions, and the efficiency of the job market, and also to continuously improve the business sophistication. However, the innovation is the key which leads to the right competitiveness. The results of the “Report on global competitiveness 2013 – 2014” show that the countries which encourage the innovativity with the strong institutional frame are developing and find place among the most competitive countries of the world.

According to the HDI, Republic of Croatia belongs into the group of very developed countries, which means that the future economic development will not have significant influence on the human development. Until the outbreak of the economic crisis, the differences in Republic of Croatia were not too severe, but the deepening of the crisis has quickened the gap between the classes and the differences between the richest and poorest countries. When this element is added to HDI, the Republic of Croatia is among the last in the region.

The changes have to happen in the area of the job market reform, macro-economical environmet, better encouragement of the foreign investments and education, and the innovations and new technologies have to become the priorities of the governmental and business policy. For Republic of Croatia, as the economically small country, the growth of the competitiveness is of utmost importance, because it encourages the faster economical growth and new employment; also, in such way, the poverty and social inequality is reduced, and the social inclusion of the population is increased.

LITERATURE

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ELECTROMOBILITY AND ITS PROSPECTS FOR SLOVAKIA AND THE EUROPEAN UNION
PETER DRÁBIK
RÓBERT REHÁK

ABSTRACT
The objective of the article is to analyze the current trends in the automotive industry for the use of alternative fuels, primarily focusing on electromobility, identify potential uses of electric vehicles on EU and the Slovak market. The article makes recommendations that would increase the marketability of electric vehicles in Slovakia and gives focus on prospects of electromobility in EU and in Slovakia. The result of the solving problem is a detailed and comprehensive view of electromobility as an alternative mode of transport in EU and Slovakia and proposals in the form of recommendations towards its next development.¹

KEY WORDS: Electromobility, Electric vehicles, Automotive industry.

1. INTRODUCTION
Transport plays a macroeconomic perspective vital role in the economy of each country. It creates not only a lot of jobs for residents of the state itself, but also contributes to the GDP and provides economic growth of the internal market, which impacts on the living standards of citizens. The number of cars is growing constantly in the world, consumers demand is high, production costs are falling and this is reflected ultimately in price. Same trend has been increased care and in particular public interest in a healthy lifestyle in recent years. Traffic congestion is also increasing with growing number of cars and the boom of private transport and urban residents are in addition to emissions also exposed to excessive noise. More than half of population lives in cities precisely, while public transport is responsible for one quarter of CO2 emissions from transport. We would not have to speak about emissions and about rapid increase in greenhouse gas emissions, if the majority of the industry, along with transportation are not dependent on oil supplies. Oil stocks are constantly open to debate and views are different from each other only slightly optimism or pessimism. However, the oil will be probably rarer in coming decades and its increasingly scarce resources are limited in both cases. Greater problem is a itself dependent on oil as its own reserves in the context of transportation. It was not so long ago, when there was a similar situation in our country and Slovakia were weaned on natural gas supplies and relied on reserves. In the case of oil it would threat with economic security, accompanied by inflation, changes in the trade balance, competitiveness, etc..

Alleviate of this condition and achieve sustainable mobility require mainly the introduction of new technologies and innovations, as well as modernization of transport and infrastructure investment. Transport recently becoming greener, but due to its increased volume is slight changes and its current functioning is unsustainable in the long term. Further development of transport should be based on improving energy efficiency in vehicles, development and deployment of propulsion systems, and renewable fuels, more efficient use of transport modes and infrastructure. Problems in the field of transport is also aware of the European Commission, which responds to the unfavorable situation by issuing directives and measures binding on all member countries. Alternative fuels are extremely important in pursuit of the independence of European transport on fossil fuels and reducing greenhouse gas such as natural gas, biofuels, hydrogen. Given the fact that natural gas is already for a long time well established in the market and fuel cell cars will be launched first in 2015, we will dedicate to electromobility of third generations.

Aim of this article is analyze of current trends in the automotive industry for the use of alternative fuels with a focus on electromobility, identify possibilities of electric cars on the Slovak market and make recommendations that would increase the marketability of electric vehicles in Slovakia as well as in the EU.

2. ELECTROMOBILITY
Theory of the first electric vehicle is vary. Some authors indicate the year 1835, when the Dutch professor Sibrandus Stratingh of Groningen suggested a small electric car designed by his assistant Christhoperom Becker, while others attribute this invention to Hungarian physicist Anián Eaters of the 1828th.

¹ The paper is output of research project: VEGA č. 1/0134/14 “Podpora inovácií v distribučných procesoch prostredníctvom zavádzania moderných technológií a optimalizácie logistických činností so zameraním na zníženie záťaže životného prostredia a na zvyšovanie kvality života”
The current time is often dubbed as the “path back to the future” in the context of EVs which is characterized by new technologies that open up far more possibilities. Energy companies and automobile manufacturers lead to the creation of ever more accessible and attractive conditions for the application of electric vehicles on the market in collaboration with governments, as well as the following graph shows. Year 2011 was accompanied by the addition of high expectation especially intensive mass production of electric cars and more penetration on the market, resulting in relatively lower prices and the first tangible results in terms of marketability. Already 114,000 electric cars were sold worldwide by the end of the year. Due to the outcome were also involved individual national governments and their various interventions and subsidized promoted the sale of electric vehicles and infrastructure.

**Table 1. Sales of electrovehicles in 2011**

<table>
<thead>
<tr>
<th>Country</th>
<th>Sales</th>
<th>Share of Total Sales (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>1,020</td>
<td>11.7%</td>
</tr>
<tr>
<td>France</td>
<td>953</td>
<td>10.6%</td>
</tr>
<tr>
<td>GB</td>
<td>599</td>
<td>6.8%</td>
</tr>
<tr>
<td>NL</td>
<td>269</td>
<td>3.0%</td>
</tr>
<tr>
<td>IT</td>
<td>122</td>
<td>1.4%</td>
</tr>
<tr>
<td>SP</td>
<td>122</td>
<td>1.4%</td>
</tr>
<tr>
<td>DE</td>
<td>85</td>
<td>1.0%</td>
</tr>
<tr>
<td>NO</td>
<td>850</td>
<td>9.7%</td>
</tr>
<tr>
<td>SK</td>
<td>20</td>
<td>0.2%</td>
</tr>
<tr>
<td>CZ</td>
<td>43</td>
<td>0.5%</td>
</tr>
<tr>
<td>HU</td>
<td>20</td>
<td>0.2%</td>
</tr>
</tbody>
</table>


Actual characteristics of EV contributed to achieve such numbers to prospective addition of state incentives. Smooth running engine, higher efficiency of energy use, silent vehicles, zero emissions of primary and more economical operation and service affect consumers’ purchasing decisions in no small way. Conversely, we meet in various discussions with the view that the right silent car can act as a disadvantage with respect to the safety of road users or are confrontations related to “zero” emissions, which are only transferred to plants producing electricity. Real disadvantages are still relatively high price compared to conventional vehicles, limited range (up to about 200 km on a single charge), and we have some countries with underdeveloped network of the charging stations.

### 1.1 E-Mobility in the European Union

Europe has become the second largest market for electric vehicles after the United States and whit number of electric cars sold surpassed Japan. 18,939 pure electric vehicles were registered in Europe in the first half of 2013 (compared to 15,503 in the first half of 2012), while in the United States were registered almost 30,000 electric vehicles. In Japan, the figure was less than 6000.

French carmaker Renault played a significant role in above-mentioned first half of year 2013, which among all automakers sold in Europe the largest number of EVs - 6000 pieces. Nissan placed on second place with 5500 the number of vehicles and third position belonged electric Smart (1500). The first two places have already been reordering in favor of Nissan at the end of the year.
As we can see, the most successful electromobile Renault Zoe is a model. The consumer can choose from three versions (Life, Zen, Intens) in selected markets. The differences between the versions do not lie in battery capacity, but on the technological equipment of the vehicle. While electric range on a single charge (up to 210 km) to surpass the average, the final price, at which the customer can purchase a vehicle, is more acceptable as compared to other EVs. French government provided subsidies for the purchase of an electric car with a value of EUR 5 000 in 2012. This financial amount increased by a further 2,000 after year, which ultimately reduces cost of electric car by 7,000, and left us to pay 13,700, to become the owner of a new car. Also remarkable is that in order to reduce the selling price to sell a vehicle with batteries, but the batteries would be rented through a contracted delivery cheap electricity. There are several tariffs in respect of the lease the battery, but in cities the electric car is still worth it, because electric cars are exempt from congestion charges, parking or even road taxes. In the UK, customers have the opportunity to use allowance of 5,000 pounds. French carmaker also boasts equipment fleet at the Chateau of Versailles, which consists of 23 Renault electric vehicles in the following composition: 10 Twizy, Kangoo ZE 10, 3 Zoe. New owners viral video describing the delights of electric car ownership would to convince of potential customers also. The newest attraction of the Renault workshop is to enable its customers to recharge electric charge for one hour daily on official stores automakers. “Quick electric charger” can recharge the battery during this time up to 80%.

France is earned a leading position in Europe in 2013. The number of electric and hybrid vehicles are accounted for 3.1% share of the total passenger car market. Compared to 2012, sales of electric vehicles (including light commercial vehicles) increased by 50%, while sales of hybrid vehicles increased by 60%. All in all, France boasts 8,779 registration of personal electric vehicles for the year 2013.

### Table 3. Government funding of R & D electromobility in the years 2012/2013 (mil. EUR)

<table>
<thead>
<tr>
<th></th>
<th>2012</th>
<th>2013</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>2,484</td>
<td>1,984</td>
<td>-500</td>
</tr>
<tr>
<td>France</td>
<td>925</td>
<td>1,354</td>
<td>-429</td>
</tr>
</tbody>
</table>


If we take into account all types of electric vehicles to plug-in hybrids to fuel cell vehicles, a mention would certainly cost the Netherlands. In December 2013 are 23% of all sales car belonged just to electric vehicles, the first three points of the marketability of these vehicles seized plug-in hybrids - Mitsubishi Outlander, Volvo V60, Toyota Prius. The fifth best-
Selling EV was electric Tesla Model S with the number of 1,127 pieces. While operating in this country, the marketability of the greatly varies are according to the benefits conferred on the Government. The Netherlands has allocated in 2015 for the promotion of electromobility budget of EUR 9 million. These funds are used for the purpose of implementing the national action plan, i.e. to stimulate electric mobility, strengthening international cooperation and creating partnerships, improving communication and science and research.

The need to motivate undecided consumers are aware of the various municipalities on whose territory concentrates a large percentage of the population. Capital Amsterdam introduced to promote electromobility own provisioning system which is not only for the final consumer, but also for businesses planning to use electric cars, e-taxis or expensive electric vehicles intended for supply. City provides subsidies of EUR 5 000 for passenger cars to create a green transport hub, 10 000 EUR for taxis and 40 000 for trucks. We also encounter in the “carsharing” project car2go (Daimler AG) since 2011, which consists of a fleet of 300 Smart compact electric cars available in different business centers or in public parks. The user is charged payment according to the time which he needed (0.29 € / min., 12.9 € / hr.).

A similar project called Autolib also works in Paris, in which the people can temporarily rent electric Bluecar of the 250 stations. This “carsharing” scheme is perceived by the municipality of the capital as an additional system to public transport and as an alternative to private vehicle ownership. Given the severe air pollution metropolis smog appears this project as an interesting and attractive, especially in cases when the city introduces measures in the form of a recent (March, 2014) ban the use of cars with an even / odd numbered license plates on the road. Regulation shall not apply to electric and hybrid vehicles as well as vehicles with at least a three-man crew.

Nor other European countries are lagging in favoring electric vehicles. In Germany as the owner of an electric car is exempt from road tax for the first five years from the date of registration of the vehicle. Support of research plays an important role in this area. The result created from this platform was called Electromobility model regions 2009 – 2011. The Federal Government has allocated over these years to support electromobility around EUR 500 million and fair share of this budget stimulated just the supply side. It is expected to double that investment in the next period. The following table shows supporting tools electromobility in other European countries.

### Table 4. Summary of system tools support electromobility

<table>
<thead>
<tr>
<th>Country</th>
<th>single</th>
<th>regular</th>
<th>Support for Business</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>financial contribution</td>
<td>financial contribution</td>
<td>fee waiver / tax</td>
</tr>
<tr>
<td>Italy</td>
<td>5 000 €</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Spain</td>
<td>25 % of price (max.6 000 €)</td>
<td>✔️</td>
<td>15 000 € resp. 30 000 €²</td>
</tr>
<tr>
<td>Belgium</td>
<td>3 500 €</td>
<td>over 9 190 €</td>
<td>✔️</td>
</tr>
<tr>
<td>Denmark</td>
<td>over 2 000 €</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Sweden</td>
<td>4 500 €²</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Austria</td>
<td>to 4 000 €³</td>
<td>✔️</td>
<td>✔️</td>
</tr>
<tr>
<td>Estonia</td>
<td>to 18 000 € (on charger 1 000 €)</td>
<td>✔️</td>
<td>✔️</td>
</tr>
</tbody>
</table>


### 1.2 E-mobility in Slovakia

Slovakia is a major world center for the automotive industry due to the presence of three factories carmakers Volkswagen, PSA Peugeot Citroen, Kia Motors quantities and concentrations of businesses supplying their subcontracts production. The graph below shows the number of cars produced in Slovakia for individual years, and since 2013 was expected closeness to the limit of one million cars produced annually.

Our country has produced more than 980,000 cars in 2013, which in comparison to the previous year is an increase of 5.8%. Slovakia has once again defended lead the world in the number of vehicles produced per capita based on record statistics for the past year (181 cars / 1,000 inhabitants).
Table 5. Production of cars in Slovakia

<table>
<thead>
<tr>
<th>Year</th>
<th>VW</th>
<th>KIA</th>
<th>PSA</th>
<th>2013 - odhad</th>
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<tr>
<td>1993</td>
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<td>2013</td>
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Although the presence of three automobile manufacturers built large logistics network, the tradition of the chemical or electrical engineering would evoke huge prerequisite for a well functioning market electric vehicles in Slovakia. The situation is less favorable and the fact remains the fact that the neighboring countries are lagging behind in this area. Same obstacles which we face today stood for the main failure of these vehicles and vice versa strong expansion of cars with internal combustion engine. Due to oil price shocks has risen again interested in electric vehicles, while the 90 years of the 20th century brought a novelty in the administration of the Czechoslovak electric Skoda Shortcut. He was made in 1990 to a Swiss customer order, the year thanks to the great success of the vehicle in Western Europe came the order from the merchant from the same country per 1000. His successor was mass-produced (10 EVs per day) Skoda Favorit Eltra, who used the Czech Post. It was the year 1994 when it started in Banovce Bebravou (Slovakia) the work intensively on electric car project MicroEko. Except for a few minor changes are not so very different from the original Microcar, which were light commercial vehicle. The first electric Slovak car successfully underwent approval in some European countries, but it was not push in serial production after processing production documentation and achievements at the International Motor Show in Brno. Currently, the only electromobile produced in Slovakia is the German Volkswagen E-Up !. Competed on our market are brands of electric cars Nissan Leaf, Smart ED or sister trio Citroen C-Zero, Mitsubishi MiEV, Peugeot iION. In the case of low confidence in electric vehicles, customers can choose between plug-in hybrid Toyota Prius, Opel Ampera, or other newer models.

The first public charging station for electric vehicles in Slovakia was put into operation on Nov. 30, 2010 in Košice (VSE), followed the next year in Bratislava and Nitra Poprad. In Bratislava is also the first-ever quickcharging station (power up to 44 kW), which is accessible to the public in Petrzalka (Einstein Street) at the gas station Slovnaft and operated by ZSE (ZSE). The second location for such a station, but not the public, the site is the exclusive distributor of Auto-Impex. The network spread quickcharger the third station in November 2013, and situated in the the city. There you will be able to charge electric car owners to charge their vehicles without any authorization or registration by the end of 2014, depending on the location and the appropriate strategic places (public car parks, shopping centers etc.) located on the territory of Slovakia and other charging stations at which charging requires several hours (power 3.7 kW / 22 kW). The practical aspects are the main initiators of various energy companies (ZSE, SSE, VSE, SE), which are expected significant contribution and participation in the development of charging infrastructure, as well as the actual testing of electric or preparation of pilot projects.

In addition to energy companies, manufacturers of electric cars and service providers in this area would be the development of e-mobility in Slovakia, should significantly help the government and local governments. There is the concept of e-mobility under the auspices of the Ministry of Economy since 2011, which established in 2012 a working group on electromobility involving all major actors (governmental and non-governmental) in the field of electromobility to create Slovakia platform for e-mobility modeled on Germany. The result of this collaboration was the development of an expert group key document entitled “Basis of the Strategy of development of electromobility in the Slovak Republic”, which was approved in May 2013 at the Ministry of Economy. Another goal after reaching this important step was the creation of a new concept in the form of analysis and recommendations stemming from the strategic documents, as well as draft policies to promote e-mobility in Slovakia. The outcome was a paper entitled “Strategy for the development of electric mobility and its impact on the national economy of the Slovak Republic”, part of which is presented in the following table.2

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Table 6. SWOT analysis of development of electromobility in Slovakia

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
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</table>
| • strong position of the automotive industry in the national economy and the developed network of suppliers  
  • strong position electrotechnical industry in the national economy  
  • the availability of experts in technical fields, including IT  
  • relatively low labor costs compared to key markets for electromobility  
  • functioning platform and professional dialogue focused on the development of electromobility in Slovakia  
  • suitable energy mix | • low expenditure on research and development  
  • underdeveloped research base automotive industry in Slovakia  
  • lagging behind neighboring countries (AU, CZ), which began systematically to promote electromobility rather  
  • slower economy and increased focus on price often at the expense of quality  
  • harmonization of norms and standards  
  • lack of infrastructure for charging electric vehicles  
  • lower sensitivity of the adoption of environmental, respectively. innovative solutions |

<table>
<thead>
<tr>
<th>Opportunities</th>
<th>Threats</th>
</tr>
</thead>
</table>
| • reduce dependence on oil  
  • reduce emissions and pollution concentration transport locations  
  • creation of new skilled jobs  
  • developing research base in some areas related to electromobility  
  • impetus for innovative automotive companies and their suppliers  
  • creation of new innovative business models and services  
  • effective integration of mainly smaller, respectively local RES  
  • the use of electric vehicles in smart energy networks (SmartGrids) | • inefficient investments made for the development of electromobility  
  • lag in competitor countries, failure in stimulating investment and employment  
  • delay reduction in input prices due to slow implementation of economies of scale in mass production  
  • unsystematic ad hoc solutions |


Slovak Association for electromobility (SEVA) was founded in 2012 in Bratislava in order to represent and promote the development of transport and transport infrastructure for passenger and commercial electric vehicles in Slovakia. The main motivating factor of representatives energy and electronics industries in establishing the association was the need of creating an effective platform for communication and cooperation between administrations, educational institutions, businesses and foreign partners. Also it participates in the preparation of essential documents, legislation and projects for the development of electromobility. The association has expanded the scope of its activities on the area of education and training in March 2014. In addition to research activities it is also aimed at providing consultation in the development of training courses focusing on the practice of theses focused on the issue of electromobility, organizing training events and presentations at high schools and colleges that offer internships and professional experience for students.³

GreenWay project focuses on environmental transport of goods through a complex system of infrastructure, logistics, technology and services. Its ultimate aim is to build an attractive and interesting business model in electromobility in Slovakia. Building a network of battery exchange stations allows to replace lengthy recharging by simply replacing the whole battery box car, while exchange stations is charging continuous in their ongoing. Given the range of services offered was founded a company called GreenWay Operator, which ensures the operation of the whole system.

Green Way Operator includes:
• fleet of electric supply,  
• the network of charging stations and battery exchange station,  
• electricity for charging,  
• information system for the management and operation of the system,  
• service,  
• operator service / call center.

Záujemca o služby GreenWay si môže vybrať medzi paušálom GW70 (70 000 km) alebo GW40 (40 000 km), v cene ktorého dostane elektromobil, inštalovanie nabíjacej infraštruktúry vo firme, spotrebovanú elektrickú energiu, výmenu batérií na stanicíach, náhradné vozidlo, uhradenie poistenia, daňi a poplatkov, výmenu pneumatík a zaškolenie vodičov.

Interested in the services GreenWay can choose between GW70-paid (70,000 km) or GW40 (40,000 km), the price of which receive electric vehicle charging infrastructure installation in the company, consumed energy, battery exchange stations, replacement vehicle, pay for insurance, taxes and fees, tire replacement and training of drivers.

Table 7. Comparison of total costs for the fee GW70 and GW40

![Graph showing comparison of costs](image)


The service is open to all companies that provide goods distribution through light commercial vehicles up to 3.5 tons or interested in “green technologies” and environmental protection. Special offer is designed for those who use electric cars far from discouraged by the high price.4


VIBRATe in numbers:
• the first Central European cross-border project to promote electromobility,
• Project Budget € 1,250,000,
• co-financing of 72% of public sources, primarily from CBC Programme Slovakia - Austria 2007-2013,
• 20 users of electric vehicles in the region,
• 9 charging stations in Bratislava, 4 of which are for the general public,
• 4 rýchlonabíjacie stations along the highway between Bratislava and Vienna, Bratislava 1.5

Project partners representing Slovakia were ZSE and Energy Centre Bratislava. From the Austrian company Verbund parties participated Wien Energie and EVN.

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There were formed 2 types of scenarios in connection with the development and future of electromobility in Slovakia formed under the Working Group MHSR: standard and technology. Order to develop scenarios based on certain assumptions (development of oil prices, the price of batteries and electric vehicles, public perception, business environment, consumer behavior and public infrastructure) is to create a rough picture of the impact of electromobility development on the environment, assess the degree of dependence on fossil fuels, energy intensity assess whether the development of the necessary infrastructure.

- **Standard scenario** - slight Slovakia’s interest in the development sector, conservative image of global market developments (development of prices and demand for electric vehicles in Western Europe), 7 thousand electric cars for 2020.
- **Technological scenario** - a proactive app roach in Slovakia (to become a leader in e-mobility in Central Europe), optimistic developments in global markets, in accordance with the relevant forecasts, 25-thousand electric cars for 2020.

Table 8. Forecast of newly registered electric vehicles in Slovakia

![Graph](attachment://table8.png)


### 2. PROPOSALS AND RECOMMENDATIONS

**State intervention** - because Slovakia is not a country like Norway, which has extensive reserves of oil and natural gas and results of operations where there is a surplus in the state treasury, it is necessary well consider in our conditions introducing specific measures for the development of e-mobility. It would be too naive expect from state direct subsidies for the purchase of an electric car, and therefore should be more focus on other supporting tools of indirect nature, without which the number of electric vehicles in Slovakia hardly grew. During the analysis of various documents and foreign studies, we came across on a number of measures that could help the current situation in the field of e-mobility, but this application requires a systematic approach. It is important to suggest a timetable for their introduction and temporal scope, because due to this sustainability can not be introduced all at once. It would be attractive for consumers remission of fees and charges associated with the operation of an electric vehicle (registration fee, road tax, tolls and tolls), the opportunity to recharge their electric vehicles for a discounted tariff for supply of electricity to park in designated areas for electric cars in the city center, as also use the lanes for public transport, which is not yet in Slovak towns too much, but their extension would certainly be worth considering municipal bodies to improve and thinking “ground” clearance and public transport. It would also still reserved for parking space for the owner of an electric car in his residence. From my own experience I can say that in some urban areas Bratislava without prepaid parking is almost impossible to find a parking space close to the apartment. The use of dedicated lanes follows the introduction of visible signs electric car, which will give the vehicle owner feel special and by which it will be able to easily identify such. Owners of electric cars could also appreciate input into some areas closer to the center of the city, at least businesses to supply this service. City Bratislava has a plan to extend the time to enter some pedestrian zones since 4:00 arguing that electric vehicles are quiet. In such cases, the account also of the fact that in addition to the noise of the engine is noisy and the like handling and transshipment to supply this and the resulting effect can be minimized. E-mobility in Slovakia is located in a vicious circle, people do not buy electric vehicles, charging infrastructure is also in Slovak territory inadequate. Also, companies are not interested in building new charging station, until propagate the number of electric cars on the road. If state had not a clear vision in this area, support businesses and individuals, we would not have to lead these discussions. That is why it is important to consider the introduction of various tax breaks and incentives, co-financing, aid in finding financial resources, building permits for developers who think of e-mobility, procurement of electric vehicles into the ranks of police and firemen.

**Segmentation** – we can argue under studied of secondary surveys that potential consumers and those interested in electric cars have emerged as modern humans, mostly to 34, interested in technology and its surroundings, open innovation
and indicating trends. As Tesla Motors focuses on the premium segment, other car manufacturers should be targeted also to a specific segment based on actual surveys, particularly in Slovakia, where consumers are not favoring of direct financial subsidies from the government and the current bid price for electric ranges up to 30 000 EUR. Electric vehicle would be communicated as a vehicle whose possession reflects the image of the consumer and makes it exceptional in relation to the surroundings. Besides these characteristics, electric car owner looks like rational and educated consumer who is aware of the negative impact of industry and human activity on the environment, achieves success in work and daily raids around 20 km, ie. primarily used car for short distances within the city. Electric vehicle should therefore be exclusively presented as a vehicle for urban areas, which in comparison with conventional cars seems to be more practical and more economical. Its use nationwide traveling in Slovakia is only a matter of time and depends on the pace of infrastructure development.

Marketing communication - to be able to selling electric vehicles in Slovakia and in the EU, the potential owners have at least know their positive aspects. We have in mind the wider community also. Many people in electric vehicles imagine only a high price and short range. The aim should be to inform and educate the public as well as direction of advertising message to the target segment. Appropriate forms can be considered product placement, guerilla marketing, mobile marketing, internet marketing and other less traditional forms that are somehow modern, imaginative and accepted by the target group.

Education - For education system are typical research and development activities in the field of electric vehicles. Probably the most famous project was the development of student electrical formulas, involving the Slovak Technical University in Bratislava and the company ZSE. As more practical benefit of the University we consider the design and development of special hybrid vehicles, while the R & D activities is no less than the University of Žilina University or Technical University of Kosice. If we consider a real expansion of electric vehicles in Slovakia and the EU in the future, we have experts in this field. It is necessary to establish cooperation at all levels, ie. we should involve all market EVs in education and forgive the outdated teaching methods. The results are not only worthy projects in student competitions. We must enable students to learn and learn about electro-accredited under the new program, elective courses or courses whose completion would guarantee success in the labor market. Courses opened by the carmakers or other commercial companies on campus seem as a supplementary education to students of the theoretical basis for their learning curve in business processes, where the company would train their future employees. This model need also the investment from cooperation from the side of state and public institutions.

Partnerships, leasing and service - cost of electric vehicles will be the biggest obstacle in Slovakia for which many consumers have not bought a vehicle. It is not possible since the long term to rely on an endless state support in the industry. Carrying high initial development costs for the customer is also unpromising. Carmakers have to consider creating global partnerships in technologies that allow them to achieve lower costs for the introduction of large-scale, as well as reduce overall risk. Electric vehicles current price could be reduced, for example, if the seller offered the most expensive components of the vehicle - battery - for leasing, or could be interested about electric vehicle designed repayment program. If carmakers want to gain new customers, they must provide certain guarantees to the consumer losing the sense of insecurity when he decides on the automobile. The battery life is one of the causes of doubt and hesitation. The battery should be warranted, during which there would be, if anything goes wrong the customer would be given a temporary replacement vehicle until the fault has been removed or replaced without charge the battery with a new one. Also, in order to avoid that the owner of an electric car remains on the road somewhere with the battery without recharging it from any source, vendor or other entity should establish a mobile assistance service, which would in an emergency recharge the electric vehicle. Other incentives could be less frequent checks and controls, free service and simple to install recharging equipment at the customer’s home, enabling to comfortably recharge your electric car while you sleep and have it fully ready for each day.

3. CONCLUSION

The article allows us to understand the nature of e-mobility and deployment of electric vehicles in road traffic. The important elements are production of electric vehicles, charging net and infrastructures, information and communication technology and legislation. The electric mobility appears to be an alternative solution meeting the economic, ecological and social aspects of sustainability in view on the current traffic situation, which is characterized by strong growth performance and share emissions from transport.,

Traffic problems are registered by European and other world countries that they have decided to implement national strategies to promote the development of e-mobility in the form of direct financial subsidies or through non-financial instruments, or a combination thereof. Funds spent in the electromobility sector should also ensure increased employment in the country while reducing dependence on fossil fuels. Not less important is the contribution of electric mobility and
improve the environment by reducing CO2 emissions, noise reduction or other adverse consequences for human health. Among the driving characteristics and specifications it should be emphasized efficiency of energy use, lower operating costs than conventional cars, the engine runs smoothly and energy recovery. The main disadvantages is discourage of many potential consumers from buying an electric car, consider a limited range (up to 200 km on a single charge), battery life and recharging, the length of which depends on the type of charging station, and the high selling price.

Electromobility has currently the greatest opportunity to establish itself in the market, thanks to its great variety of international agreements and partnerships for the purpose of its development, as well as increased public interest in this topic for the last time. Mentioned national strategies help to the development of e-mobility, which not only motivate people when buying an electric car, but is also involved in the development of infrastructure. The leaders on a global scale in electric vehicles are countries like USA, Japan, the Netherlands, France, Norway, Germany and so on. We can when buying an electric vehicle to meet with government support in the form of direct financial contributions or tax credits that may in the Nordic countries such as Norway reach up to the amount of the value of a new car. Semantically equivalent are also public investment in science and research in the field of e-mobility and individual support to local governments. We have also taking into account other measures in force in foreign countries as free charging, parking in the city center, the possibility of using marked lanes for public transport, forgiveness toll, the electric vehicle becomes in the eyes of consumers attractive means of transport. The benefits can outweigh the negative aspects.

One part of this article is the view on the current situation in Slovakia, on the road which can be very rarely see the electric car, despite the fact that the country has excellent conditions for the development of electromobility. The perspective is the presence of 3 carmakers, sufficient electricity infrastructure and long tradition in the chemical and electrical industries. One of the problems which hinder the development of e-mobility in Slovakia is lack of a network of charging stations (so far only in the cities of Bratislava, Nitra, Poprad, Košice). The exception is the capital city of Bratislava, where the current network of charging stations is sufficient for new potential owners of electric vehicles. Another challenge is the limited range. Nissan Leaf EVs is around 200km on a single charge. Linking the west and east is scarce. After charging stations come to the most serious problem and it is the selling price of an electric vehicle. It is moving around 30 000. While in some foreign countries, citizens have three times higher wages than people in Slovakia and the country still supports contributions from about 5,000 to 7,000 euro for buying an electric vehicle, the Slovak government supports e-mobility very passively, only on information - promotional way. So it will remain same in the near future, until the government does not accept and approves strategic documents submitted. The exception is the small amount of charging stations, which has the ability to recharge the car’s battery charge. If we find a real candidate who is willing to pay the full amount for the electric car, the menu selection of electric vehicles is limited at some small urban vehicles. Subchapter proposals and recommendations is devoted the options how make attractive the electric vehicles in our conditions. It is necessary to focus on non-financial support programs, because direct financial subsidies are for us rather unreal as real. Other mission is create an attractive business model for entrepreneurs whose ideas of electromobility and the associated cost savings interesting rather than end consumers. It’s the only way to develop electromobility in Slovakia to this times, while prices of batteries and electric vehicles doesn’t decrease due to introduction of new technology and more efficient manufacturing.

The future of electric vehicles may be viewed as vehicles primarily intended to urban areas for short distances. Although the EU aims in urban transport by 2030, reduce the use of conventionally fueled cars in half, it is important to note that the role of electric vehicles is not fully replace cars with internal combustion engine and therefore comparison is sometimes not justified. Electric vehicles can be also extremely useful in meeting the objectives to be achieved by the introduction of urban logistics zero emission of CO2 in the centers of large cities in 2030.

LITERATURE


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(Endnotes)

1 15 000 € for vehicles cat.N2; 30 000 € for buses
2 Support is limited to the first 5,000 registered EVs
3 True if the electric charge using electricity generated from photovoltaic system
SHELF MANAGEMENT STRATEGY FOR CONSUMER BRAND MANAGEMENT: A CASE ABOUT ON-THE-SHELF RETAIL STORES IN JAPAN
MASAE KANAI
MAREK L. ZIELINSKI
MASAAKI TAKEMURA

ABSTRACT
The purpose of this paper is to show a somewhat new, in some instances curious, but perhaps interesting and critical case on brand management. A dominant brand related textbook sometimes treats brand management as an operating something. Here, when we say the operating something, it means that brand can be the entity, and this entity strongly influences consumer emotions. Under this thought, consumers buy the brand, not a product. Rather they purchase the meaning and symbol of the brand. Indeed, some brands, especially several European Luxuries, have often been highly praised with this type of evaluation. Brand at a prominent position can have an extremely strong reputation and loyalty from consumers. Once a company assumes brand as its competitive tool, the achievement of brand management imperatively becomes the same as luxury brand management.

In our research, in contrast to these findings, we found an interesting case with Japanese consumer brand goods. In contrast to European luxury brands, brands of consumer goods do not have exclusive consumer loyalty. So, most of them struggle with any competition. In this case, the brand has faced price competition at the point of purchase, in the retail store. Specifically, competition occurred on the shelf.

In this paper, we proposed the conceptual framework for consumer brand management. Previous studies sometimes ignored this fact, they often explored how and why brand worked. From these studies, managerial implications tended to focus on accumulating brand equity through consumers' perceptions. These implications were not enough to face competition in retail stores.

From our observation and case study, we noticed that consumer brands faced strong competition. Supposing retailer's behaviour, we organized a conceptual framework for consumer brand management. Our implication corresponds to retailer's strategy preferences and brand strength (level of equity). From these combinations, even preliminary, there are four managerial implications.

KEY WORDS: Consumer Brand, Trade Allowance, Shelf Management, Killer Product, Brand Management.

1. INTRODUCTION
The aim of this paper is to show a somewhat new case from a Japanese retail store. From this case, we will try to suggest some managerial implications for management of brand in consumer packaged goods. There are several reasons why we chose this research; the main three are as follows. First, many previous pieces of research focused on brand itself. Here brand itself means that these brand studies treated brand as an entity. It is natural that a researcher might know what brand is, how brand works, and why brand is important and so on. We focus on what happens at the retail store. Second, these studies rarely focused on consumer packaged goods brand. According to our observation, consumer brand goods encountered severe competition in the retail store. Third, research tended to focus on empirical studies, not management itself.

In this paper, we will pay attention to the scene in the retail store, the competition around brand. This type of study is rare in past brand research, but there is some similar research. A lot of frameworks and/or brand management strategies have been published for more than two decades. Specifically, after Farquhar (1989) and Aaker (1991), and as the Management Science Institute (MSI) nominated brand management as one of the most important issues for the marketing academy in the coming decades, brand related studies have been flourishing. According to Heding et al. (2009), at least, more than six theoretical approaches can be identified. Though we will discuss these approaches in detail later, many previous research findings and managerial implications implicitly assumed that brand management always succeeded. A few studies that examined marketing failure certainly existed, but this failure was based on management decision-making mistakes (Hartlay, 2009). Our case focuses on the competition between brand and the other marketing tools on the retail store shelf. From our case, brand for consumer packaged goods (hereafter consumer brand) always encounters several competitors in the retail store. Previous dominant brand management sometimes underestimated the competition due to emphasize on the brands' competitiveness and effectiveness. Competition in the retail store often eroded brand loyalty.
Related with the first reason, we will secondly focus on consumer brand because many studies have not distinguished consumer brand and luxury brand. A small amount of previous research has paid some attention to this distinction. We do know many famous classifications of brand, such as umbrella brand, company brand, product brand, service brand, sub-brand, luxury brand, and many others. Here, we deliberately say this variety of brand did not lead to managerial implications, just purely theoretical. Rather we do say, researchers give attention to these first, but then, most consumer brand studies came to resemble luxury brand management because the luxury brand has high consumer loyalty and equity. The aim of brand management is to establish strong brand equity (Aaker, 1991). From the definition, high brand equity automatically received high consumer perception, reputation, and evaluation. As Nielsen Global Survey of Loyalty Sentiment reported, even when brand perception has been high, consumers have often changed their minds in front of the shelf because there were many sales promotions. In this paper, we will try to develop a brand management framework for consumer brand goods.

The last and most important reason why we would study this theme is that less and unrealistic managerial implications have been emphasized. We actually have sympathy for why this kind of implication has been insisted on because previous brand management focused on brand itself, not the management perspective. Though we will discuss this management perspective later, one point we wish to make is as follows. Previous brand theory and management paid attention to consumer and brand relation. Even brand community theory, its focus is on the dyadic relationship between consumer and brand (Muniz and O’Guinn, 1995). Specifically with consumer brand, consumers will find many interruptions before they actually buy a certain brand at the store. We try to understand these interruptions in this study.

To achieve our purpose, we have organized this paper as follows. First, we briefly review previous dominant theories, especially focused on managerial findings. Second, we are going to introduce our case. Third, we will develop an analytical framework for consumer brand management. In the last section, we will summarize our findings and suggest future potential tasks.

2. PREVIOUS RELATED STUDIES ON BRAND MANAGERIAL IMPLICATIONS

Here we are going to review previous studies. In contrast to traditional research papers, we will pay attention to mostly managerial implications. The task in this section is to show several managerial implications from previous theories. These implications are not our own opinion. Most of them are based on Heding et al. (2009).

2.1. Seven Brand Studies and Their Managerial Implications

One surprising fact we saw during the review process was that there were few comprehensive reviews on brand and brand management. Though there are many books focused on brand “something”, they summarized previous research findings, and as is the nature of published books, their reviews became out of date sooner. It is definitely an amazing fact because brand related research might be one of the most important themes in both academics and practice. Here we are trying to summarize previous dominant research with Heding’s framework (Heding et al. 2009). Then we suggest logical results for managerial implications from their findings. There are seven main approaches to brand analysis; economic, identity, consumer-based, personality, relational, community, and cultural approach.

2.1.1. Economic Approach

According to Heding et al. (2009), the economic approach was the first understanding of brand management. From an anthropologists’ view, Gardener and Levy (1955) revealed several consumer attitudes rather than the rational economic choices for brands. They noticed there were different roles to them. Products usually enabled us to do something; a pencil for writing, a shovel for digging a hole, a TV for watching a program, a car for taking us somewhere, and so on. Compared to the product, the role of brand is different. First of all, brand is actually the name of the product. However, brand can become an object like meaning (Baudilliard, 1970). Brand management under this approach is to communicate this meaning correctly.

This approach uses the neoclassical economic theory assumption; the rational economic person. This kind of person can choose one optimal thing from the perfect information structure. Of course, the optimal here means that the product can yield the maximum consumer utility. Under this assumption, brand works as a kind of quality guarantee and insurance to consumer choice. The economic person always selects a good that is priced lower than the others. Even under this condition, the company can sell branded products with a higher price because the consumer can recognize which goods (branded ones or non-branded ones) yield maximum utility, when the company can communicate precise information in terms of brand to consumers.

Consequently, the managerial implication from this understanding is to make precise information of a brand known.
2.1.2. Identity Approach

The identity approach is closely related with the corporate image which consumers have. Identity is generally defined as something that can be determined and specified for what it is. Thus identity can work as a distinction from anything around that. This distinction is important to brand because consumers would like to know what that brand stands for, what difference there is from another product which has the same function. This fact means that consumers don’t recognize brand itself, rather the difference.

The recognition of difference is related to linguistics. Meaning, buying and using of the products (or goods) are easily linked to the company’s image, which has those products and brands. According to Saussure linguistic theory, meanings are created by differences (Saussure, 1959/1995). Brand works as well as the words do because it has a name. So, brand always creates some difference from other products.

To have some competitive advantage by brand, it is insufficient to only have meanings. Brands with just meaning only have distinction. A brand needs to also have an identity. In this approach, consumer preference assumes that brand is unified with the identity of the company.

Consequently, managerial implications from this understanding are to create a strong vision, image, and culture of the company.

2.1.3. Consumer-based Approach

The consumer-based approach is the most famous brand management theory. A series of Keller’s works (Keller, 1993; Keller 1997; Keller, 2003) were one of the prominent achievements of this approach. According to Heding et al. (2009), Keller achieved making brand management linked to brand equity. Previous brand management had rarely discussed brand equity. Brand equity is defined as an asset which is accumulated in consumers’ brains (memories).

This approach is based on cognitive psychology. The cognitive psychology emphasizes the role of knowledge. Consumers can store a large amount of knowledge in their memories. Memories are regarded as being constructed from fragmented information through many nodes and links. Information storage is activated by a sensory input and spreading activities begin. This mechanism is sometimes called the associative network.

Once we assume the associative network, our memories in terms of brands have the same structure. Brand information is mapped in consumers’ brains. Brand in consumers’ memories is constructed with associative networks. For instance, a certain brand, such as Volkswagen has an associative network; Germany, Europe, car, high quality, engineering, reliability, and so on. Now, brand knowledge has two main factors, brand awareness and brand image (Keller, 1993).

Related with this theoretical framework, the managerial implication is to spur high level of awareness of brand to consumers.

2.1.4. Personality Approach

Many people believe the personality approach began with Aaker’s work (Aaker, 1997). This is almost true, but there are some related studies prior to this. Plummer (1985) suggested the personality role from his experience at an advertisement company. According to his experience at Dr. Pepper, consumers would have attachment to even advertising icons; creating characters through “humanizing”. Here humanizing means a tendency where consumers sometimes give advertising icons personalities and human feelings. Consumers also do this to brand.

Personality, in general, is defined as the set of emotional qualities that makes a person different from other people. So, personality requires something to make it what we know. In this meaning, the brand personality approach is similar to the identity approach. Compared to the identity approach, however, the brand personality approach has some different assumptions. The identity approach focuses on brand having identity, but this approach assumes consumers establish themselves through having brands.

Consumers can express themselves through having brand, if the brand has a distinguished feature. It is easy to understand what Veblen (1899) did. He vividly described how consumption became a means of reputation; conspicuous consumption.

Conspicuous consumption of valuable goods is a means of reputability to the gentleman of leisure. As wealth accumulates on his hands, his own unaided effort will not avail to sufficiently put his opulence in evidence by this method. (Veblen, 1899/1994, p.47)
This process told us that there is a case in which we bought goods for reputation, not for utility. In this case, valuable goods work as a symbol. The symbol affords consumers class distinction. This distinction, of course, contributes to establish identity or self because we cannot realize who we are without any comparison (Saussure, 1959/ 1995).

Brand personality is constructed from consumer attitudes to the brand. Consumers consume brand as a means to their identity construction project; brand is important for consumers' construction and expression of self.

The managerial implications from the personal approach findings is to understand the mechanisms of construction that consumers use the brand for and be able to translate them into a brand personality that delivers value and relevance for the consumer (Heding et al., 2009, p. 138). Furthermore, detailed and elaborative brand personality construction processes have been already discussed. That result should be specially mentioned because the other approaches processes have seldom been discussed.

2.1.5. Relational Approach

The reason why this approach is famous is because it revealed an important role for consumers’ everyday lives (Fournier, 1998). Some researchers had anxieties about brand studies. (Aaker and Fournier, 1995). As Fournier explained her idea of brand relationship, with some retrospective longing, this idea was based on her experience in an advertising agency (Heding et al., 2009, pp. 176-178).

This idea was from a B2B relationship marketing paradigm. It has been said for a long time that business to business relations often show stable and long-term business transactions, compared to the orthodox economic transaction model, market transaction (Hakansson ed., 1982). Based on this thought, her complaint to traditional brand understanding thought of brand as an economic source of information. This thought assumed that people had relationships with inanimate brands. From her experience, consumer and brand relationships were purposeful; they were engaged as meaning-laden resources to help people to live their lives.

Theoretically, the relational brand approach is grounded in phenomenology. Phenomenology assumes a socially constructed reality as opposed to the assumed external and objective reality of the positivist tradition (Husserl, 1907/ 1973). This thought emphasizes that human beings have a tendency to endow objects and even abstract ideas with human personality characteristics. As we reviewed before, consumers sometimes animated a brand humanized and personalized (Heding et al., 2009, p.156). This tendency is sometimes called animism. Animism is one attitude which regards anything around humans as possessing a spiritual essence.

According to phenomenological thought, animism can be classified as one method to construct social facts through relationships between human beings and objects, as can be brand. Consumer and brand relationships, however, exist in many types of variety. Fournier (1998) recognized at least 15 types of relationship forms; arranged marriages, casual friends, marriages of convenience, committed partnerships, best friendships, compartmentalized friendships, kinships, rebounds, childhood friendships, courtships, dependences, flings, enmities, secret affairs, and enslavements. Here we do not necessarily show all definitions of them, rather the classification mechanism is important.

These fifteen relationships can be classified by the Brand Relation Quality construct. This construct focuses on the quality, depth, and strength of consumer-brand relationships. Then six relationship factors (love/ passion, self-connection, interdependence, commitment, intimacy, and brand partner quality) influence the durability and quality of the relationships (Heding et al., 2009, pp. 160-163.)

Compared to the above conceptualizing and theorizing efforts, the managerial implication is somewhat insufficient. One suggestion is as follows; to focus on meaning. Unfortunately, according to the relationship approach, this finding emphasized the characteristics of interaction nature of consumer-brand relationships. This actually means that to make a meaning depends on the context, situation, and atmosphere around a specific relationship.

2.1.6. Community Approach

Like the other cases in the other approaches, the existence of brand community has been known for a long time, but it was a small fraction of consumers and represented marginal populations. Many practitioners and academicians ignored such small markets. When Muniz and O’Guinn (2001) conceptualized the community through their own experiences on vintage SAAB, their aim was mostly placed on emphasizing the theoretical new. What they realized was that social interaction (socialization) occurs through the brand. This interaction prompted them to recognize what SAAB's meaning was among them. However, they had recognized the practical impact before social network society flourished.
Theoretically, the brand community approach contributed to finding out why brand equity is generated. Previous approaches, especially economic and identity, assumed brand equity could be yielded by a manufacturer, or a marketer. Against these approaches, the community approach had two assumptions. First, consumers are always finding a meaning of brand, or value of it. It is sometimes called the “consumer-brand-consumer triad” (Muniz and O’Guinn, 2001, p. 427). It argues that brands are social objects and socially constructed. It asserts that consumers are actively involved in that creation. It further shows that brand community clearly affects brand equity. The second assumption is that researchers believe that the essence of brand can be revealed through ethnographical studies. One aspect of brand is actually why name, logo, and trademark sometimes can have extremely high value. One persuasive or honest answer is there is no value just in name. Name is merely the order of the letters, or sound. Logo is as well. Ethnographical study possibly bares a value creating process among consumers.

The managerial implication of brand community is unusually feasible. There are mainly two implications. First, unleash works as liked because consumers in a brand community freely admire the brand. They enthusiastically circulate advantages of the brand. Second, watch them carefully. Consumers in a brand community interact among each other. Through the interaction consumers always discover new meanings, i.e. value of the brand. Marketers can commercialize these findings.

2.1.7. Cultural Approach

The cultural brand approach focuses on the paradox of brand. Individually, brand works well, for instance accumulating brand equity, making one's identity, contributing to enjoying one's life, and so on. On the macro level, however, brand works irrationally. Compared to some approaches we referred to above, interest in this research has mainly been focused not on brand itself, but the cultural effect of brand.

Brand, in many cases global brand, sometimes strongly influences our consumption, even lifestyle. Such brand becomes a brand icon, and has social meanings. This approach is connected to culture, or social systems, rather than brand itself. Understanding about culture means to reveal why a certain phenomena happens.

For instance, the iPod became a fashion symbol. Levy (2007) described the social acceptance process of the iPod. The early iPod included a pair of white earphones. At the time, white colored earphones were not common. People who wore white earphones were easily noticed and recognized as having an iPod. This fact contributed to the iPod’s acceptance in society. Before the iPod, it was difficult to recognize who had what type of portable music player.

The managerial implications from this approach are apparent. Focus on making a brand iconic. Brand managers can follow the cultural branding model through and through in an attempt to follow in the footsteps of the iconic brands.

2.2. Findings of Implication from Brand Studies

We have briefly reviewed previous brand analyses. There are seven main ones, and we mostly focused on the managerial implications. Here we can summarize them as in Table 1 below.

Table 1. Seven Managerial Implications

<table>
<thead>
<tr>
<th>Approaches</th>
<th>Economic</th>
<th>Identity</th>
<th>Consumer-based</th>
<th>Personality</th>
<th>Relational</th>
<th>Community</th>
<th>Cultural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focus</td>
<td>Marketing mix</td>
<td>Brand identity</td>
<td>Consumer memory</td>
<td>Brand personality</td>
<td>Consumer and brand relationship</td>
<td>Consumer groups</td>
<td>Brand influence to culture</td>
</tr>
<tr>
<td>Logic</td>
<td>Rational consumer behaviour</td>
<td>Corporation and brand coherence</td>
<td>Consumers construct brand preference</td>
<td>Human tendency to give personality</td>
<td>Consumer has many memories with brand</td>
<td>Group dynamics</td>
<td>Generating macro phenomena</td>
</tr>
<tr>
<td>Implication</td>
<td>Right communication</td>
<td>Establish strong vision, message</td>
<td>Establish brand awareness</td>
<td>To know mechanism of construction of personality</td>
<td>To find meaning of brand</td>
<td>Watch the community</td>
<td>Make icon brand for society</td>
</tr>
</tbody>
</table>
Our focus is specifically on the managerial implications. We understand that researchers are interested in making theories, rarely practices in management. This is neither a complaint nor objection. Rather the perspective from practitioners is that they are interested in the usefulness of theories for management practices. Some of them work, others do not. For consumer goods in particular it is rare that theories work sufficiently because competition exists in the retail store.

There exist some reasons why previous brand studies ignore competition. First, once strong brand is established, a company with the brand may face monopolistic competition (Chamberlin, 1933). From this thought, an established brand (high equity brand as we referred to above) becomes an imperative managerial mission. Second, it has been sometimes said that marketing is the technique to avoid price competition (Kotler and Armstrong, 2011). Brand is one of the best tactical tools to avoid price competition through consumer’s strong loyalty.

Whatever theories suppose on competition, severe competition exists in retail stores. In this paper, we introduce the competition in retail stores. A famous insecticide brand has struggled with competitors in the retail store. We will elaborate on this case in the following section.

3. THE CASE STUDY

In this section, we will introduce our case. This case is mainly based on our field survey and interviews from the last five years and more. Most of them were from pure academic research which was led by our research projects, but some stemmed from our consulting activities. According to our confidential agreement, detailed information must sometimes be veiled, especially individual names, titles, affiliations, and so on.

Our comprehensive findings are constructed from at least five cases. They are Suntory, Uni-Liver, Lion, Earth Chemical, and Kobayashi-Pharmaceutical. Due to page restrictions, we will focus on Lion and Earth Chemical. The reason why we chose them are, first, they compete at the same retail stores; discount retailers. Second, Lion has a strong brand of insecticide, but Earth does not have a strong or even moderate brand. Third and the most important, this case shows what brand encounters in the retail store. First we will briefly introduce these companies’ profiles, then the case in detail.

3.1.1. Company Profiles

In our case here, two companies competed to gain shelf space in discount retail stores. Shelf space competition means the amount of share on the shelf. In general, the company that has many varieties of brands could obtain a large amount.

LION Co. LTD., is a Japanese healthcare goods company which has been in business for over 120 years, since 1891. LION is one of the biggest Japanese manufacturers, which produces medical supplies, chemical agents and toiletry goods. For example detergent, soap, toothbrushes and paste, even child food, and so on. The capital is 34.43 billion yen, and sales were 253.7 billion (EUR1.812 billion, EUR1.00 = JPY140) in 2013. LION has many popular brands in soap, shampoo, hair care, medicated soap, oral goods, detergents, eye drops, cooking paper, anti-perspiration lotion, household detergent, fragrances, kitchen detergent and so forth. LION sells its products not only in Japan but also in Asian countries such as Malaysia, China, Indonesia, Korea, and the financial performances have been relatively satisfactory.

Earth Chemical Co. LTD., is a manufacturer. They do marketing, and the import/export of pharmaceutical products, quasi-drugs, medical tools, and household products. Earth Chemical was founded in 1892 as Kimura Chemical in Osaka. It had 3,377.60 million yen capital and sales were 96.4 billion yen (EUR0.688 billion) in 2013. Earth Chemical manufactures and sells more than 30 categories of products and more than 300 brands in Japan and East Asian countries.

3.1.2 The Case

LION changed its fundamental product strategy in 2006. Before this, LION was organized in a divisional structure. In general, since a divisional structure has its own factories, it is natural that the product is always emphasized. Product means a problem-solving tool, function, and method. So, there are always several alternative options. LION tried to establish a unique position against competitors through brand. The general strategy of LION has changed from product to brand and acquiring brand. After that, LION aggressively acquired several brands.

LION acquired the over-the-counter (hereafter OTC) medical business from CHUGAI pharmaceutical company in December 2004 at a cost of about 10 billion yen. CHUGAI is also a big Japanese pharmaceutical firm. Sales for the OTC business of CHUGAI were 20 billion yen, whereas LION was 31.5 billion yen. By this business transfer, it was expected that LION’s sales would become over 50 billion yen and they could secure a good position in the home medical business.
The strategy after the business transfer was product line extension. There were 14 brands transferred from CHUGAI pharmaceutical. At first, LION integrated those 14 brands into 7, and then tried to promote those 7 brands with its marketing, because LION was good at marketing. In general, the home medicine business is not a good business for pharmaceutical companies, yet for LION, which is a health care company, it seemed to be a very attractive business. One of the reasons was that the profitability was higher than the home medicine goods which LION handled. Another reason was that LION thought it was possible to increase its sales with the marketing know-how fostered in its home care goods business. LION also thought that it could make a new market by combining home care and the medical care business with its marketing and could also develop new products by combining the technology of home care, chemical and medical business. LION also expected to extend its business fields with the synergy effect of acquired brands and technology of LION. As for the channel, LION also expected to combine its medical channel and home care channel.

An insecticide, Barusan, was planned to start a new line-up of products. LION thought they could sell it not only through the medical channel (owned by CHUGAI) but also through the general merchandize channel owned by LION. Barusan was planned to be marketed not only as for Cockroaches (the original usage), but also for mites or fleas in cushions or as a spray for house dust. The product line-up of Barusan was organized into 10 brands.

In this way, LION thought they could make an effective advertisement and product concept with its marketing, and consumer and market research. They also expected they could have an assortment of product line-ups in the Barusan brand and also gain good results in the category of insecticides through force of sales. However, the results were totally different.

The distribution channel of Barusan was mainly drug chain-stores, and the chain-stores could be classified into two types, one with strong leadership in headquarters, and the other with weak leadership. LION had confidence in its marketing, yet it could not smoothly lead to sales of the products of the Barusan brand. Actually, Barusan suffered a big loss to its competitor-Earth Chemical. The rival company Earth Chemical has similar products like Cockroach HOIHOI (Cockroach exterminating method) and Earth Chemical jet (insecticide spray). Before the merger, CHUGAI sold at a ratio of 4:6 to Earth Chemical, whereas after the merger the ratio became 3:7.

Why couldn’t LION win in sales against Earth Chemical in the category of insecticide, even with LION’s strong ability in product development and market research? The business size of LION is far bigger than Earth Chemical. The capital of Earth Chemical is 3.3 billion yen and its sales are 96.4 billion yen (135.7 billion yen of consolidated sales). Its products compete with LION, but its business size is relatively small. Yet, Earth Chemical’s sales are larger than LION.

One of the reasons is whether one has a dominant brand or not. Both Earth Chemical and LION have a full line-up, but it is not enough. The crucial thing is how many dominant brands they have. Earth Chemical has strong brands such as Earth-Jet and Cockroach HOIHOI, these are dominant brands. The second reason is that there are channel (or buyer) barriers. As we mentioned, there are two types of chain stores whose leadership at headquarters is strong or weak. There are chain-stores with weak leadership at the head quarters, yet whose leadership of each store is strong. For this type of chain-store, Earth Chemical tries to thoroughly eliminate its rival’s products by paying a kickback to the stores. However, a dominant brand is necessary to give rebates to stores. If rebates are offered without a dominant brand to eliminate a rival’s brands, it could not succeed. Strong brands which are dominant make it possible to offer rebates in return for controlling a rival’s brand supply below 10%. This could become a channel barrier, or eliminate competitors. Earth Chemical thoroughly engaged in such trade allowances. With these allowance systems, LION’s product Barusan, which is a strong brand, was restrained in its display. Even if one has a strong ability to do marketing, market research or product development, one can lose because of the on-site transactions.

There are differences between each product category in decision making. For examples, a person who plans to buy a CHANEL bag has a will to buy it in advance (before visiting CHANEL’s shop), so seldom switches their decision to buy a HERMES bag at the store. Luxury brands have high rates of decision-making in advance. Therefore, they try to construct strong relationships with their customers. However, how about other product categories? How many products do consumers make such brand decision-making about?

For example, as for aspirin, 45% of the consumers make a decision on which brand they buy on-site (or 55% have already made a decision in advance). Consumers have their favourite brand for aspirin (in this case, 55% of the consumers). This figure is a relatively high rate. As for kitchen detergent, 75% of consumers do not decide which brand they will buy in advance, and they decide at stores. They make a decision according to promotion, display place, price or so on. When brands are popular to some extent, there is no big difference between each brand preference; so many consumers make their decision based on the price.

LION has acquired Barusan (insecticide), Guronsan (stomach medicine), Guromont (liquid nutrient), Pair acne (agent for pimples), Bufferin (aspirin) and so on. LION decided on those M&A considering the synergy effect of product development and marketing which LION has. However, we could not say it was a big success.
LION developed a new product that was a bathroom cleaning detergent, which could remove and prevent mold. This new product is a revolutionary product using a smoke treatment method developed from Barusan. When smoke spreads out in the bathroom it prevents and eliminates mold for six months. This product was developed using Barusan’s technique and LION’s strong product brand name of LOOK. LOOK is a strong home detergent brand of LION. However revolutionary and helpful this product was, it was not a big success.

The reason was that LION could not make use of the know-how of former product managers of the brands. LION acquired brands, but just M&A the brands and changed the sales of enterprise. LION could not acquire the people in charge or the know-how of the brand. LION accepted a minimum number of CHUGAI’s people in charge of development and marketing of Barusan. This may be the reason why LION could not utilize the brand effectively.

3.2. The Case Discussion

We have introduced our case study on brand competition in the retail store. Here we summarize our case study to adjust to our research agenda. First, brand can be revitalized. Of course, we have learnt of brand revitalization because it has been sometimes discussed (Berry, 1992; Ewing et al., 1995; Munthree and Bick, 2006). Keller (1999) showed the revitalizing process by introducing several cases. His approach, as we saw above, was based on consumer knowledge (memory structure), so his proposal was organized mainly into two; expanding brand awareness and improving brand image. Expanding brand awareness was related with the usage of brands. He said, “Another potential opportunity to increase frequency of use is when consumers’ perceptions of their usage differs from the reality of their usage” (Keller, 1999, p. 113.). Improving brand image was related with consumers’ markets. Brand necessarily ignored some parts of markets. For improving brand image, to fill these ignored markets is one useful method.

Even though, previous brand revitalization strategies mostly paid attention to consumers’ responses (Thomas and Kohli, 2009). Our case showed the method to do so. As we showed, when CHUGAI had Barusan, it was not only productive, but also an effective brand. However, LION realized the brand potential of Barusan. LION acquired Barusan from CHUGAI, and then added many Barusan branded products. The ideal plot of LION was to occupy the shelves in retail stores. Not only LION, but other consumer product companies in Japan knew consumers decided to buy a product in front of the shelf in retail stores.

Second, even branded products were still regarded as just goods in the retail stores. This fact means that the retailer does not care about brand, rather it cares about sales much more. For a retailer, the important thing is sales, not maintaining brand equity of products. Lastly, there is competition in the retail store. Even famous brands cannot avoid competition. Compared with the impression of dominant brand equity study today, brand competition has been discussed for a long time. To begin with, the brand loyalty model revealed consumers sometimes switched brands (Cunningham, 1956). Carpenter and Lehamann (1985) empirically showed price promotion in local newspaper advertising both encourages and discourages brand switching.

Many researchers believed that consumer preference did not persist for a long time. These researchers were not interested in the endogenous trait of brand. Preferably, brand is the analytical unit to which consumers clearly and specifically express their needs. Brand is just data.

A few studies related with our research focus on brand in retail stores. Mishra and Raghunathan (2004) discussed the optimal inventory management. Their finding was that optimal inventory level was different from not only how many brands retailers or manufacturers had, but also which had the initiative of inventory control. In general, manufacturer’s profit tended to be higher than with the retail initiative inventory system.

The brands in these studies were quite different from brand equity studies. We may say that the focus of these studies was not the same as brand equity studies. Furthermore, to our study, this brand research can be studied as both brand management from retailers and manufacturers.

Even strong brands, cannot avoid competition in retail stores. Previous brand studies sometimes ignored the point-of-sales; retail stores. Of course, we understand that brand studies did not care about the point-of-sales. For brand researchers knowing how brand works is important how to sell products is not. This problem must be examined by retail management studies.
4. CONCEPTUAL FRAMEWORK AND MANAGERIAL IMPLICATIONS

We have discussed two issues in this paper. First, for our study, what managerial implications could previous studies suggest? Regarding this issue, we probably do not have a totally realized implication yet. Here, totally means realized enough for implementation by manufacturers. This issue is related with the second issue.

The second is competition. From our case study, unexpected practices which previous brand studies have not forecasted happened in retail stores. From the results above, we will propose a theoretical contribution on brand management study here. First, we will discuss some topics on brand management. Second, we will develop a brief conceptual framework for future study.

4.1. Conceptual Framework

As we discussed above, consumer brand implications must solve the problems a manufacturer encounters. That was the aggressive trade allowance. Retailers sometimes concentrate their attentions to raise their sales in currency. They have never cared about brand equity. Trade allowances often worked as rebates, so retailers would prefer to accept the offerings because the rebate would directly contribute to retailer’s profits.

Therefore, our conceptual framework shall reflect retailer’s preference and brand strength (level of equity). Figure 1 describes these two conditions as the conceptual dimensions. A horizontal axis means retailer’s preference. Retailer’s preferences polarize from pull to push. They trace so called marketing pull and push strategy. If the retailer chooses pull strategy, it focuses on brand equity selling. In this case, the retailer believes that the brand can pull consumers more than price reduction. Alternatively, a retailer chooses push strategy, it focuses on selling, that is, price reducing. A vertical axis expresses brand strength, the level of brand equity. This dimension refers to a manufacturer’s strategy, or its belief in its own brand’s strength.

**Figure 1.** Conceptual framework for consumer brand management

![Conceptual framework for consumer brand management](image)

**4.2. Managerial Implications**

In the figure, we propose decision options for manufacturers. That is our managerial implication. This framework has a matching assumption. The matching assumption supposes one mechanism which works optimally when elements have interrelated relevantly. With regards to our case, matching is achieved when both strategies of retailer and manufacturer are complementary.

In figure 1, we arranged some managerial options on trial. When retailer preference stays in pull strategy, manufacturers face an easy situation. If brand strength is strong, both preferences will be matched. These retailers can be regarded as key accounts. Manufacturers must keep them for a long time. Even if brand strength is not strong, the retailer does not sell at a lower price, but rather fosters brand equity.
In contrast to a strong brand case, manufacturers with a weak brand encounter a difficult situation. In the worst case, to quit trading is the likeliest option. This is the case when a competitor with aggressive trade allowances tries to achieve the eliminate-oriented trade allowance. It is not worth continuing to do business with such retailers.

In a more moderate case, consider the combination with strong brand and push strategy preference. In this case, a manufacturer still prepares the persuading process for retailers, to maintain brand equity contributing to retailer’s profitability, for a long time. Under this option, manufacturers should extend the product line with an umbrella brand strategy. Many sub-brands can occupy the shelf against competitors.

Between both polarized ends, there are more moderate cases. The case in which retailers would like to prefer push strategy can be changed through a long-term relationship orientation by manufacturers. Long-term and arduous work is needed, but this should be worthwhile.

5. CONCLUSION AND FUTURE RESEARCH

Here in the last section, we briefly summarize our work. We will point out our findings, and according to them, we shall suggest for next research topics.

5.1. Conclusion

In this paper, we proposed the conceptual framework for consumer brand management. Previous studies sometimes ignored this fact, they often explored how and why brand worked. From these studies, managerial implications tended to focus on accumulating brand equity through consumers’ perceptions. These implications were not enough to face competition in retail stores.

From our observation and case study, we noticed that consumer brands faced strong competition. Supposing retailer’s behaviour, we organized a conceptual framework for consumer brand management. Our implication corresponds to retailer’s strategy preferences and brand strength (level of equity). From these combinations, even preliminary, there are four managerial implications.

5.2. Future Research

Of course, it is natural to suppose a designing survey research. In our conceptual framework, at a glance, two empirical pieces of data are needed, but our suggestion proposes one sided data. We suppose that manufacturer’s perceptions sometimes skew to emphasize brand strength as stronger than retailer’s perceptions do. We forecast that the more skewed perceptions, the worse performances because the brand strength and retailer’s strategy preferences were not matched, and vice versa.

Secondly, we suggest this research be furthered in detailed cases. We are not sure what type of study this should be, but we need to know more about what happened to brands in retail stores. Moreover, we do not know about actual brand management operation in retailers yet. From these cases, we shall know how brands can survive; what important management factors maintain brand equity and why brand sometimes has reduced equity at the site.

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ABSTRACT
Consumer ethnocentrism is strongly connected to appeals from domestic companies and the government to buy domestic products. In times of economic crises consumer ethnocentrism becomes an important consumer behavior issue, especially in highly import addicted countries. The authors were interested in finding out statistically significant attitude differences among Croatian students regarding this phenomenon.

The level of ethnocentrism is analyzed on a representative sample of 74 students, measured by the consumer ethnocentrism tendencies scale (CETSCALE), Shimp and Sharma 1987.

The aim is to explore facts related to the level of ethnocentrism, as well as possible gender differences. The theoretical and practical implications of the results were discussed.

KEY WORDS: Consumer ethnocentrism, consumer behavior, CET, gender differences.

1. INTRODUCTION
As long with expanded economic crisis and the globalization trends governments tend to encourage domestic consumers to buy domestic products. In this sense, consumer ethnocentrism is represented as a help to national economy and more customers begin to consider the act of buying foreign made products as inappropriate. Much research relating to this phenomenon of consumer behavior has been conducted over past decades.

The term “ethnocentrism” was initially defined by sociologist Sumner but Shimp and Sharma (1987.) defined the term consumer ethnocentrism as the consumers’ belief that purchasing imported products is wrong because it hurts the domestic economy, causes loss of jobs, and is plainly unpatriotic, products from other countries are objects of contempt to highly ethnocentric consumers. On the other hand to non-ethnocentric consumers, foreign products are objects to be evaluated on their own merits without consideration for where they are made.

The idea of ethnocentrism relies on presumption that the consumer patriotic emotions are associated with the attitudes and purchase intentions.

The objective of this paper is to reveal the attitudes among Croatian students regarding consumer ethnocentrism. The authors were interested in finding out statistically significant attitude differences among Croatian students.

1.1. Literature review
The construct of ethnocentrism relies on the presumption that the consumer’s patriotic emotions will have significant effects on attitudes and purchase intentions and their ultimate behavior.

Shimp and Sharma (1987.) developed a 17-item scale, called the CETSCALE, to measure the construct of consumer ethnocentrism. After that many researchers focused on CETSCALE scale and presented different results for certain groups of consumers and product categories.

Sharma (1995.) indicated the statistic connection between patriotism and consumer ethnocentrism, defining patriotism as love and affection to a country.

According to Auruskeviciene, in general, research (Shimp and Sharma, 1987; Netemeyer et al. , 1991; Sharma et al ., 1995; Klein et al ., 1998.) validates that high consumer ethnocentrism discourages the purchase of foreign products and increases the tendency to evaluate them negatively. Moreover, it is considered not only as consumer behavior, but as a question of morality.
Consumer ethnocentrism becomes important in highly import addicted countries when promoting buying domestic products affects the buying of imported goods thus increasing the demand for domestic products.

Studies using the CETSCALE have been conducted in many countries around the world and have found that the degree of consumer ethnocentrism varies between individuals according to demographic and economic factors, as well as perceives threat from and animosity towards international competition. Schankarmahesh (2006.) identified four broad categories of factors influencing consumer ethnocentrism, socio - psychological, political, economic and demographic.

The analyses of the results indicate that the degree of consumer ethnocentrism varies in different countries and during the time. According to Vassella recent research has shown a downward trend from a mean score 68.58 (Shimp and Sharma, 1987.) to 45.2 (Fraering and Elahee, 2001.) and 43.87 (YOO and Donthu, 2005.). Students surveyed in 05-06 had a mean score of 43.2 (Vassella, et al. 2010.).

Several studies have been conducted in the Middle and Southeast European transitional countries.

The reports done in Bosnia and Hercegovina, Croatia and Serbia in 2001 have measured the highest score of consumer ethnocentrism in Bosnia and Hercegovina while Croatia was closely behind them (Iversen, et al., 2001.). A downward trend in ethnocentric attitudes was reported in Serbia in a survey done from 2005. to 2008. (Veljković, 2009.).


The study focused on Croatian consumers (Renko, et al. 2012.) indicated weak but significant correlations between consumer ethnocentrism tendencies and purchase intentions.

Matić (2013.) reported that animosity toward ex - Yugoslav products implicated consumer’s ethnocentric tendencies.

Ozretić - Došen (2005.) indicated that younger consumers with higher educational degree and earnings show lower tendencies of ethnocentrism.

Research regarding student’s generations reveal differences in consumer ethnocentrism between nations (Lin, et al., 2005.) and CETSCALE scores are higher for older adults than for younger adults (Nielsen, Spence 1997.). The literature review indicated different results regarding the impact of gender on the level of ethnocentrism. In some surveys women preferred more domestic products than men (Han 1998.; Philip and Brown 2003.) but in research done in Japan (Lin, et al.,2005.) and Serbia (Marinković, et al.2010.) men scored higher.

2. EMPIRICAL RESEARCH

2.1. Study objectives

Our study attempts to evaluate the level of ethnocentrism of Business School students because the process by which students ethnocentrism tendencies are socialized is worth examining. According to the literature review, many variable influence consumer ethnocentrism. Ethnocentrism is regarded as a psycho-social phenomenon connected to individual personality, cultural and social framework. Moreover, it is determined in large part from individual’s socialization. The family is the primary socialization agent but adults, peers and may media also influence child’s ethnocentric orientation. This orientation once formed usually carriers into adulthood. In this sense we have tried to understand how country might effects the consumer’s attitudes of buying foreign products.

As a secondary objective we wanted to see how gender issues influence student ethnocentric values and to get richer, deeper insight into male and female student’s attitudes.

The reason of performing the research on the student’s population is because it could be a valuable guidance to understand how students feel about purchasing foreign versus domestic products in order to develop and implement ethnocentric themes in educational programs.
2.2. Hypotheses

Given the findings of our literature review, this study examines the following hypotheses:

1. The level of ethnocentrism attitudes among students will show no significant result in comparison with previous research.

2. There is no significant result between male and female students in CETSCALE score.

2.3. Methodology

Data were gathered in Libertas Business School in Zagreb in June 2014 on a sample of business school students. The survey was voluntary and anonymous. The study included total of 74 business school students out of which 46 were female and 28 were male. The average age of all participants was 27.46 and the average age of female was 28.46 and male 25.82.

<table>
<thead>
<tr>
<th>Count of age</th>
<th>19-23</th>
<th>24-28</th>
<th>29-33</th>
<th>34-38</th>
<th>39-43</th>
<th>44-48</th>
<th>Total</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>11</td>
<td>10</td>
<td>2</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>28</td>
<td>28.46</td>
</tr>
<tr>
<td>Females</td>
<td>18</td>
<td>10</td>
<td>5</td>
<td>8</td>
<td>3</td>
<td>2</td>
<td>46</td>
<td>25.82</td>
</tr>
</tbody>
</table>

Source: Author’s research (N = 74)

2.4. The measuring instrument

The measuring instrument used in the survey was 17-item Consumer Ethnocentrism Tendency Scale (CETSCALE) created by Shimp and Shrama in 1987. The questionnaire consists of the same number of items as the original version translated in Croatian language. The scale has response format named -point Likert type scale starting from point 1 “strongly agree” to point 5 “strongly disagree”. Scores on the 17 CETSCALE items were summarized to create a single variable measuring consumer ethnocentrism, not their product preferences. If scores on the CETSCALE are high, foreign products are considered more negatively than domestic products. If scores are low, foreign products are considered positively than domestic products. The reliability analysis of the CETSCALE was calculated with the use of the Cronbach’s alpha. It is suggested that the values of 0.7 and more confirms the CETSCALE is highly reliable. The research confirms that CETSCALE remains a highly reliable survey with Cronbach’s Alpha result of 0.92.

2.5. Results

In this part we outline the main results from the survey conducted. The level of consumer ethnocentrism students surveyed had a mean CETSCALE score of 3.36. The following table 2. shows the average value and standard deviation values of the respondents’ Ethnocentrism Perceptions.

<table>
<thead>
<tr>
<th>Item</th>
<th>Average</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Citizens of Croatia should always buy local products instead of imported goods.</td>
<td>3.36</td>
<td>1.54998</td>
</tr>
<tr>
<td>2. Only products which are unavailable in Croatia should be imported.</td>
<td>3.95</td>
<td>1.47649</td>
</tr>
<tr>
<td>3. Buying Croatian products will result with sustainable economy.</td>
<td>4.14</td>
<td>0.85820</td>
</tr>
<tr>
<td>4. When buying products, the advantage should primarily have Croatian products.</td>
<td>3.89</td>
<td>0.91966</td>
</tr>
<tr>
<td>5. Buying foreign products is behavior against Croatia.</td>
<td>2.16</td>
<td>1.31581</td>
</tr>
<tr>
<td>6. It is not right to buy foreign products because that is the reason why citizens of Croatia lose their jobs.</td>
<td>2.42</td>
<td>1.42484</td>
</tr>
</tbody>
</table>
7. A real Croat should always buy Croatian products.        2.38     1.63569
8. We should buy Croatian products instead that other countries make money of us.  3.09     1.18271
9. Buying Croatian products is the best.                     3.27     1.10404
10. Purchase of foreign products should be taken down to minimal.   3.16     1.17882
11. Croatian citizens shouldn’t buy foreign products because it damages Croatian economy and cause unemployment.  2.81     1.22399
12. Every type of import should be limited.                    3.11     1.82377
13. Croatian products can be more expensive but they should have advantage in purchasing.  3.35     1.24472
14. Foreigners shouldn’t be allowed to sell their products on Croatian market.   2.18     1.10570
15. High import tariffs should be imposed in order to prevent the entry of foreign products into the Croatian market.   2.72     1.49371
16. Foreign products should be brought only if there aren’t local products.   2.97     1.83488
17. Croatian consumers who buy products from foreign countries are responsible for their citizens losing jobs.   2.28     1.41151

Note: Scores ranged from 1= strongly disagree to 5 = strongly agree. Source : Author’s research (N = 74)

The level of consumer ethnocentrism students surveyed had a mean CETSCALE score of 3.36 which is considered as an average result students. The above findings of average values in the table 2. suggests that ethnocentrism is not included in the general purchasing behaviors of the students. Looking at the results, the item 3. “Buying Croatian products will result in a sustainable economy?” indicated the highest level of the agreement 4.14.

The next graph 1. shows the results concerning the item 3. “Buying Croatian products will result in a sustainable economy?”

Graph 1. “Buying Croatian products will result in a sustainable economy?”

![Graph showing the results concerning item 3. “Buying Croatian products will result in a sustainable economy?”](image)

The graph 2. shows the result concerning item 5. “Buying foreign products is behavior against Croatia.”
Regarding the gender issue, the following table 3. shows the difference according gender for all items.

### Table 3. Average results between male and female students

<table>
<thead>
<tr>
<th>Question</th>
<th>M-male</th>
<th>M-female</th>
<th>T-test</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3.0714</td>
<td>3.5435</td>
<td>0.114</td>
<td>0.1143</td>
</tr>
<tr>
<td>2</td>
<td>3.7500</td>
<td>4.0652</td>
<td>0.282</td>
<td>0.2822</td>
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<tr>
<td>3</td>
<td>3.8929</td>
<td>4.2826</td>
<td>0.079</td>
<td>0.0791</td>
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<tr>
<td>4</td>
<td>3.7143</td>
<td>4.0000</td>
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<td>0.2162</td>
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<td>5</td>
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<td>0.0741</td>
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<td>0.504</td>
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<td>2.9286</td>
<td>3.4783</td>
<td>0.028</td>
<td>0.0280*</td>
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<td>0.0954</td>
</tr>
<tr>
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<td>2.7500</td>
<td>3.3261</td>
<td>0.074</td>
<td>0.0749</td>
</tr>
<tr>
<td>13</td>
<td>3.1786</td>
<td>3.4565</td>
<td>0.301</td>
<td>0.3018</td>
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<tr>
<td>14</td>
<td>2.0000</td>
<td>2.2826</td>
<td>0.265</td>
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<tr>
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<td>2.4286</td>
<td>2.8913</td>
<td>0.114</td>
<td>0.1148</td>
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<tr>
<td>16</td>
<td>2.8929</td>
<td>3.0217</td>
<td>0.694</td>
<td>0.6943</td>
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<tr>
<td>17</td>
<td>2.0000</td>
<td>2.4565</td>
<td>0.109</td>
<td>0.1094</td>
</tr>
</tbody>
</table>

* p<0.01

The differences between male and female students were tested by t-test. We registered statistical significant differences only in item 9. “Buying Croatian products is the best”. As we see in table 2. the average result for female students is 3.478. The average result for male students is 2.928. T-test is 0.028 (p<0.01).

The following graph 3. shows the item 9. in which the statistical difference was found.

---

**Graph 2. “Buying foreign products is behavior against Croatia”**

![Graph showing the comparison between buying foreign and Croatian products](image)

Source: Author’s research
Graph 3. Item 9. Buying Croatian products is the best

3. DISCUSSION AND CONCLUSION

As suggested by Shimp and Sharma (1987.) consumer ethnocentrism appears to be potentially valuable concept for researchers and practitioners. Our study examined consumer ethnocentrism between students as we consider that education can have impact on this phenomenon. The results should help to understand how students feel about purchasing foreign products and how to adjust educational programs to increase the knowledge in this phenomenon.

The average results of consumer ethnocentrism were achieved in this study. The general average value of the scale, which consists of 17 propositions, has been found as 3.36. It matches to the other research done on students sample in University in Mostar, Bosnia and Hercegovina (Lovrić, 2012.) where the mean score was 3.66 and another research done in Turkey where the general average value of the scale as 2.85 (Candan, 2008.). Such results suggest that the globalization effects impact consumer’s market and the general purchasing behaviors of the students. According to the findings, the first hypotheses of the study „The level of ethnocentrism attitudes among students will show no significant result in comparison with previous research” is supported. The obtained result suggests that ethnocentrism is not included in the general purchasing behaviors of the students and they tend to disagree with the phrases from the scale. It could be explained by the fact that these generations are technically well educated and through communication networks and media are in everyday contact with foreign products, stores, media images.

Although national recession and high unemployment are present, students evaluate foreign products positively because multinational corporations and the global brands have a great impact through network communications and media on student’s population.

The highest level of agreement was achieved on the item 3. “Buying Croatian products will result in a sustainable economy? “ (M=4.14; SD=0.8582). Students support buying domestic products in order to keep working places in national industry. This result could be explained by the fact that the participants were business school students and could understand that buying foreign products could hurt national economy and cause unemployment.

On the opposite the lowest level of agreement was achieved on the item 5. “Buying foreign products is behavior against Croatia” (M=2.16; SD=1.3158). Students do not consider buying foreign product inappropriate and they disagree with the proposition. This result is contradictory to the mentioned item 3. and shows that student’s knowledge about ethnocentrism is unsatisfactory.

Our research points that gender issues is relevant for students ethnocentrism, but we only registered statistical difference on the item 9. where females strongly agreed with the statement that buying Croatian products is the best. Female students tended to be more ethnocentric then male students. Accordingly, gender issue is relevant in ethnocentrism but we only registered statistical difference on one item.

Based on these findings conclusion in that second hypothesis “There is no significant result between male and female students in CETSCALE score” is mostly confirmed because there is no significant result between male and female students in CETSCALE score except on one item.
Female students showed more ethnocentrism tendencies than male students thus confirming the similar results to student’s surveys done on this issue (Nielsen, 1997). Such differences in gender could be explained by the different approach in male and female socialization process.

Additional research is needed to examine and evaluate how gender moderates the impact of consumer ethnocentrism on attitudes, intentions and behavior related to foreign made products.

In this study we focused on the level of student’s ethnocentrism and the findings suggest that students are more likely to be non - ethnocentric. It is important for marketers to understand their unique behavior and reach them in ways that are familiar and comfortable to them. Ethnocentrism tends to affect students more, and educators should play a crucial role in educating students to develop an open mindedness, appreciating cultural diversity and respect different cultural values, attitudes and deals (Dong, et al.2008.) It is also important for academic staff to create programs and topics about ethnocentrism to provide better understanding and increase of the knowledge. This study opens the question of ethnocentric tendencies and socialization as well as education programs. A primary limitation is the nature of the sample, which consisted of business school students. Future research may be extended to other segment of the population.

LITERATURE


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ABSTRACT
This paper analyses the public sector EU-15 countries, with emphasis on public expenditure where it analyses the trends in public expenditure EU-15 during the period from year 1995 until 2012. Public expenditures are measured at local and regional level (general government including social security funds) in relative proportion to the gross domestic product, in order to fully gauge the level of public expenditure. Classification of public expenditure for the EU-15 is made in accordance with the European System of Accounts (ESA-95) in order for data to be unified and thus adequate for research. This paper carries out studies to determine the average rate trend of public expenditure EU-15 in the reference period, and the causes of that particular trend. Public expenditures are classified by functional classification of government (COFOG), and consist of expenditure on general public services, social protection, education, culture, health, housing and community amenities, environmental protection, economic affairs, public order and safety, and defence. The aim of this work is to determine the trend of public spending in three observation periods. The first period is the total time series, from 1995 until 2012. Another time series includes the period up to the beginning of economic crisis, i.e. the period from 1995-2007, in order to determine the trend of public spending before the economic crisis. Last observation period includes time-series from year 2008 until 2012 in order to show the impact of the global economic crisis on public expenditure of the EU-15 countries, and the change in average rate dynamics. The analysis of the public expenditure trend in three different time periods has shown numerical impact of the crisis and the intensity of disturbance of public finances in the EU-15 countries. Expenditure on social protection, education, health, economic affairs and general public services has shown anti-cyclical nature considering the global economic crisis (2008-2012). This global economic crisis has shown the true significance of balanced and stable public finances that do not rely entirely on Keynesian principles. This is because countries that strived to reduce public expenditures before 2008 were proved resilient to the impact of the crisis and had a higher number of fiscal instruments available to mitigate the effects of the crisis.

KEY WORDS: public expenditure, COFOG, economic crisis, social protection, average rate trend.

1. INTRODUCTION
Economic theory has two opposing paradigms. One argues that government should have a passive (Smith), and the other supports an active (Keynes) role in social and economic life of citizens. In the post-war period, after the 1940-s, following the Keynesian model, as well as Pigou's concept of welfare state, many countries in the world and countries of the European Union have expanded their functions and increased public expenditure. Such a trend of public expenditure is recorded until the 1990-s. The time period that followed is the subject of this paper. The paper presents an analysis of government expenditure of the EU-15 countries based on specific classification of public expenditure. The classification of public expenditure for the EU-15 is made in accordance with the European System of Accounts (ESA 95) in order for data to be unified and thus adequate for research. ESA 95 contains a framework of reference of common classifications and rules for the accounting of the Member States for the purposes of statistical requirements of the European Union. The data on public expenditure are based on functional classification of government (COFOG). The data on member states are collected and analysed from EUROSTAT (the statistical office of the European Communities). In the paper data on public expenditure is used in relation to the gross domestic product in order to carry out a statistical analysis of the countries in question from 1995 to 2012. The expenditure analysed is the total public expenditure of the EU-15 countries at the central (state – national) and local (regional) level together with social protection funds with the purpose of fully gauging total public expenditure of an individual country. The methodology in question represents total expenditure within a country, regardless of the level of authority, which is a realistic size of the public sector. The data are consolidated and the interbudgetary units (transfers between different authority levels) are annulled so that individual expenditures would not be indicated twofold. In the period in question analysis of the balance of total public expenditure was done with regard to GDP of the EU-15 member states, with emphasis on the trend of constant rate of change of public expenditure in the 1995 – 2012, 1995 – 2007 and 2008 – 2012 periods. According to the COFOG classification, public expenditures of the EU-15 consist of outlays on general public services, social protection, education, culture, health, housing and community amenities, environmental protection, economic affairs, public order and safety and defence. In this paper the trend of public expenditure flows is analysed by means of average constant rates of change of the previously mentioned three time periods. The categories of general public service, social protection, education, health and economic affairs were analysed individually because they represent the most important and most abundant categories of public expenditure.
2. PUBLIC EXPENDITURE OF EU - 15

The member states of the European Union went through different activity models in the last century, moving from neoliberal management models to models with strong level of government interference in market relations. A clear indicator of economic paradigms with other non-economic objectives of a specific country is the government, i.e. public expenditure. The content of public expenditure indicates the fiscal, and to a great extent the economic policies of a particular country, while the level and structure of individual types of public expenditure are the bases upon which we can determine the macroeconomic priorities (issues) and the level of government interventionism. Public expenditure is made up of all outlays created by the government with public interest and the purpose of meeting social needs. (Jelićić, 2001). Public expenditure represents social needs, the size of the public sector and voter preferences on the needs of the society. It generally includes outlays on economic and social policies as well as traditional administrative tasks, together with outlays on the preservation of internal order and external defence. The constitution and other regulations determine the tasks carried out through public expenditure. Public expenditure affects the economic cycle within a country and can lead to the increase of aggregate supply through investment in infrastructure of production capacities via economic subventions. Apart from aggregate supply, countries can also influence aggregate demand through transfers and facilitate a wider customer base for specific groups of products, being very careful not to cause significant changes in prices. According to allocation channels into the society, public expenditure can contribute to economic development, i.e. the increase of the GDP, and can generally move parallel or in opposite direction to economic flows. In case of parallel flows, public expenditure increases or decreases according to economic expansion or contraction. The flow of public expenditure in opposite direction to economic flow is evidenced in social transfers, such as unemployment benefits, which increase when the market declines. Such expenditure also has a stabilizing function because it operates against the flow of the market. Apart from procyclical and countercyclical public expenditure flows, there are also acyclic public expenditure flows, which are neutral and travel on „their own” path regardless of economic flows. These are fixed outlays, such as salaries for administration, police, justice and others, which regardless of economic flows. These are fixed outlays, such as salaries for administration, police, justice and others, which regardless of economic flows. These are fixed outlays, such as salaries for administration, police, justice and others, which regardless of economic flows. These are fixed outlays, such as salaries for administration, police, justice and others, which regardless of economic flows. These are fixed outlays, such as salaries for administration, police, justice and others, which regardless of economic flows. These are fixed outlays, such as salaries for administration, police, justice and others, which regardless of economic flows. These are fixed outlays, such as salaries for administration, police, justice and others, which regardless of economic flows. These are fixed outlays, such as salaries for administration, police, justice and others, which regardless of economic flows. These are fixed outlays, such as salaries for administration, police, justice and others, which regardless of economic flows. These are fixed outlays, such as salaries for administration, police, justice and others, which regardless of economic flows. These are fixed outlays, such as salaries for administration, police, justice and others, which regardless of economic flows.

Table 1. Total public expenditure as % GDP of EU-15

<table>
<thead>
<tr>
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</thead>
<tbody>
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<td>Belgium</td>
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<td>50.8</td>
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<td>48.0</td>
</tr>
</tbody>
</table>


The level of public expenditure of the EU 15 generally moves between 40 and 60 percent of the GDP. The data show that nine out of fifteen observed countries have a higher level of public expenditure at the end of the observed period in relation to the starting 1995. The highest increase is observed in Portugal (13.13%), Luxembourg (11.60%) and the United Kingdom (11.34%). Other countries marked a lower, nonetheless significant increase: Spain by 7.19%, Belgium by 5.56%, Greece by 4.68%, Ireland by 4.15%, France by 4.04%. Only Denmark had a small and irrelevant increase (0.16%). The countries showing a decrease in public expenditure in relation to the starting period are Sweden (19.88%),
Germany (10.2%), Netherlands (10.64%), Austria (8.17%), Finland (7.8%) and Italy (3.1%). At the same time there is a noteworthy change in the time range after the emergence of the crisis and only Portugal (+ 5.97%) and the United Kingdom (+ 0.24%) show an increase in public expenditure in the 1997-2007 time period with regard to the starting year. Following recession, there is a disorder and increase of total public expenditures in all EU-15 countries, without exception. Certainly not all countries were affected equally by the unfavourable economic circumstances. Public finances of certain countries were more resilient in comparison to others. Trend analysis shows a decline in public expenditures from 1995 to 2007. However, the economic crisis entirely changes the dynamics and trend of public spending of the EU-15 countries. Absolutely all countries show a rapid and significant increase in public expenditure. The public expenditure trend is best shown in Table 2.

### Table 2. Average constant rates of change of total public expenditure of EU 15 (%)

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>Belgium</th>
<th>Denmark</th>
<th>Germany</th>
<th>Ireland</th>
<th>Greece</th>
<th>Spain</th>
<th>France</th>
<th>Italy</th>
<th>Luxembourg</th>
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<th>Portugal</th>
<th>Finland</th>
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</thead>
<tbody>
<tr>
<td>TIME PERIOD</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
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<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>1995 - 2012</td>
<td>0.4</td>
<td>-0.1</td>
<td>-1.1</td>
<td>1.1</td>
<td>0.3</td>
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<td>-0.1</td>
<td>-0.7</td>
<td>-0.1</td>
<td>0.8</td>
<td>-0.6</td>
<td>-0.5</td>
<td>0.8</td>
<td>-0.4</td>
<td>-1.3</td>
</tr>
<tr>
<td>1995 - 2007</td>
<td>-0.6</td>
<td>-1.3</td>
<td>-1.1</td>
<td>-0.8</td>
<td>-0.6</td>
<td>-1</td>
<td>-0.3</td>
<td>-0.7</td>
<td>-1</td>
<td>-0.7</td>
<td>-1.2</td>
<td>0.5</td>
<td>-2.1</td>
<td>-2.0</td>
<td>0.1</td>
</tr>
<tr>
<td>2008 - 2012</td>
<td>2.7</td>
<td>3.3</td>
<td>0.7</td>
<td>5.5</td>
<td>1.4</td>
<td>4.1</td>
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<td>1.3</td>
<td>4.3</td>
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<td>1.3</td>
<td>1.5</td>
<td>3.8</td>
<td>0.5</td>
<td>2.3</td>
</tr>
</tbody>
</table>


From the data we can conclude that the so-called PIGS countries that were most affected by the economic crisis had a considerable increase and change in trend of public expenditure. The collapse of the economy and government finances of a large number of countries demanded a solution at the entire EU level. Upon making the decision on the measures to defuse the consequences of the economic crisis from a supranational level, the European Union adopted a combined approach of fiscal and monetary policy instruments. The economic recovery through fiscal incentives and increase in public consumption was initially suggested by the European Commission. In 2008 the European Commission adopted the Plan for economic growth and increase in employment through the increase of aggregate demand. The Plan predicted measures to encourage public consumption and measures of fiscal incentives up to 1.5% of the GDP at the entire European Union level, under the condition that member states continue to meet the criteria determined by the Stability and Growth Pact. Since the plan mentioned was brought at the beginning of economic crisis, when it was difficult to estimate the severity of the crisis and its consequences, the increase of the incentive level was subsequently suggested to 2% of the GDP in 2009 and to 2.5% of the GDP in 2010. However, the achieved level of fiscal incentives at the weighted EU average was less than suggested, in totalling 0.9% of the GDP and in 2010 0.5% of the GDP (Jurčić, 2010). The Keynesian approach can perhaps spark economic growth, but it also causes budget deficit. The impossibility of balancing the budget heralds a deterioration of public finances, which can lead to a decline in credit solvency and an increase in borrowing costs. The fiscal incentive measures and the increase of public expenditure could be afforded by countries with larger and more stable economy and having government finances in order, such as the Nordic countries, Germany, Austria and the Benelux. Countries like Italy, Ireland, Spain, Portugal and Greece did not have this possibility and were left with efforts to decrease the levels of public expenditure, i.e. to implement a cost-saving policy. This again led to the emphasised specificity of individual countries, because of which each fiscal policy needs to be adjusted to other established economic factors.

Since the beginning of the economic crisis until today countries like Greece, Ireland, Portugal and Spain have suffered great financial difficulties. Each country experienced different causes of this occurrence, but all of them ended in recession and economic decline, as well as the decline in trust of the creditors in their solvency. The borrowing costs increased, and particular countries faced the impossibility of further borrowing, i.e. they faced bankruptcy (Greece). In order to suppress the worst scenario, the Economic and Monetary Union (EMU) member states founded the European Financial Stability Facility in 2010, which, in case of extreme emergency, would lend financial resources to member states of the EMU not able to raise funds on their own. The capacity of the borrowing fund was determined at 780 billion Euros, which represents an effective placement of 440 billion Euros. The Facility was a fast and only temporary solution to problems, so in 2012 the European Stability Mechanism was founded, which by June 2013 took over the role of creditor from the Financial Stability Facility. By September 2013, Ireland, Greece and Portugal received aid in the amount of almost 133 billion Euros, with ten billion Euros still available to them. Spain received almost forty billion Euros, with the possibility of additional borrowing up to the amount of 100 billion. Likewise, Cyprus received financial aid, but in a lesser

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1. Portugal, Spain, Ireland, Greece
2. A European Economic Recovery Plan
amount of 9 billion. We can observe that large funds were secured for countries not able to appear as independent debtors in the open market. The EMU in this case was seen as a great advantage and probably the last resort in escaping bankruptcy. The European Stability Mechanism should ensure further recovery of crisis-affected countries and ensure balancing of the budget and order in public finances in the long term. From the above-mentioned we can conclude that, individually, the fiscal policy of the EU member states, and especially of the EMU member states has a wider operational area and a larger number of operational instruments available in the implementation of economic policy and the policy of balancing the budget in regard to the monetary approach. In the all economic chaos, the EU-15 countries, and especially the PIGS countries suffered an additional disadvantage making the circumstances worse and de facto leading to the decline in credit solvency. The disadvantage is the year-long budget deficit policy. However, the PIGS countries did not face this situation alone, because the EU-15 average in 1995 was significantly above the level determined by the Maastricht criteria. Among the EU-15 countries, only Luxembourg operated with a surplus in 1995, while others experienced deficits, with the highest one in Germany (- 9.5%), followed by Netherlands (- 9.2%) and Greece (- 9.1%). Noteworthy is that the following year the amount of deficit average was reduced and the trend continued until 2000, when surplus was achieved. The year is also the turning point for the following five-year time period in which the coverage of public spending deteriorates and there is a re-emergence of deficit financing, but within the Maastricht criteria. The escalation of crisis in 2009 leads to deficit swelling and the violation of the Maastricht criteria. The criteria were set by the Maastricht Treaty obligating the European Union member states to implement determined measures as a prerequisite to entering the European Monetary Union and introduction of the common currency Euro. Based on the Treaty four convergence criteria were determined: inflation rate, long-term interest rate, exchange rate and government finance. The last criterion, government finance, consists of two criteria related to the budget policy and the limitation of government debt. The first is maintaining current government deficit below 3% of the GDP. Government deficit (which includes all government units) cannot exceed 3% of the GDP at the end of the fiscal year. In case it does, there must be a tendency toward diminishing and approaching the target reference value of 3%. The other criteria are related to maintaining the level of gross government debt (again including all government units) below the level of 60% of the GDP. In case that members have a higher level at the end of fiscal year they are obliged to undertake measures of diminishing government debt. For those countries that previously had government debt higher than 60% of the GDP the condition is to achieve a tendency toward diminishing the share of public debt in the GDP toward the 60% reference value. These criteria need to be maintained continually after the entrance into the Monetary Union, and this is why the Stability and Growth Pact was made with the same criteria on government finance, but with possible sanctions for those members not adhering to the established objectives. The Pact came into authority on 1 January 1999 and was revised in 2005, but the criteria relating to the level of debt and government deficit remained in force (Kesner-Škreb, 2008). The entire system and implementation of the Stability and Growth Pact is based on budget control of the member states and procedures in case of breaching the conditions set forth in the Pact. The budget control is based on the so-called system of early warning and short-term supervision. The early warning system represents one-year programmes of stabilisation and medium-term projections of the impact of these programmes on budgetary units, with the purpose of achieving balance or surplus. Economic and Financial Affairs Council (ECOFIN) has to approve the programmes of the member states. After programme approval a short-term supervision of the member states is carried out. Based on semester reports, the state of government debt and deficit of the member states is estimated. The European Commission analyses the reports and informs the Council in case of negative opinion. The Councils takes into consideration all mitigating circumstances and adopts a decision on the state of government finance. In case the Council estimates that a member state is not able to adhere to all established conditions, it undertakes the so-called Excessive Deficit Procedure (EDP). The Stability and Growth Pact determines rigorous measures for member states not able to maintain fiscal discipline. The fiscal discipline imperative of the member states is governed by the fact that after entering the Monetary Union and introducing the Euro, the member states lose the ability to independently carry out monetary policy, thus the source of internal stability and balance remains on the fiscal policy (Kersan-Škabić, 2012). Potential disorders and inability of fiscal discipline of particular countries affect the entire Eurozone, which can lead to disorders in the overall market and instability of the Euro. With the purpose of enhancing the practical implementation of fiscal discipline and stability of government finance, especially taking into consideration the difficulties in ensuring the implementation of measures for defusing the consequences of economic crisis, the EU adopted a set of regulations and a directive establishing a more effective legal framework for surveillance and coordination of economic and fiscal policies of the member states. The newly established regulation related to two sets of rules, called „Six-pack” and „Two-pack”. The „Six-pack” measures consist of five regulations and a directive, and relate to all member states of the European Union, while the „Two-pack” measures relate to the Monetary Union member states. The aim of the prescribed measures is to strengthen the preventive and corrective measures set forth in the Stability and Growth Pact. The „Six-pack” and „Two-pack” measures entered into force in December 2011. Several months later, in March 2012, the Treaty on Stability, Coordination and Governance in the Economic and Monetary Union, i.e. the so-called Fiscal Compact. When the twentieth member state of the Monetary Union (Finland) ratified the Treaty in late 2012, the Fiscal Compact entered into force on January 2013. The Fiscal Compact is an international agreement between member countries of the European Union and is legally

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binding for the members of the Monetary Union, with countries outside the euro area able to autocratically accept the Compact provisions. The novelty in measures is the limitation of the level of structural deficit to 0.5% of GDP in medium-term budget objectives within the European Semester, while for countries with the ratio of government debt to GDP significantly less than 60%, the level of structural deficit is 1.0% of GDP. This places more focus on the preventive stage. In case of exceeding the reference values the Excessive Deficit Procedure may take place and the prescribed sanction of 0.1% of the GDP is paid to the ESM. The ratifying states complied with introducing fiscal limitations in their own legislatures and in a 5-year period implementing measures in the acquis communautaire of the European Union. The surveillance and evaluation of measures within states is carried out by the European Commission, and disputes are resolved by the Court of Justice of the European Union.

In continuation the impact of the global economic crisis on public expenditure of the EU-15 countries are shown with individual approach to general public service, social protection, education, health and economic affairs, because they make up over 80% of the overall public outlays of the countries. The influence of the crisis on other expenditure units is presented summarily.

2.1. General public services

According to functional classification, general public services represent expenditure on administration, including executive and legislative organs as well as all public services provided by state officials. General public services also include foreign economic aid as well as transfers of a general character between different levels of government. The important feature of this section is that it encompasses outlays related to government debt and spending on all fiscal, i.e. financial affairs. The section of general public services in essence represents the share of „public service“, i.e. the level of bureaucratisation of the public sector, servicing of government debt, fiscal policy and other units with negligible financial share. The change trend in public expenditure flows in specific countries of the EU 15 can be seen in Table 3.

Table 3. Average constant rates of change of public expenditure for general public services (%)  

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>Belgium</th>
<th>Denmark</th>
<th>Germany</th>
<th>Ireland</th>
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</tr>
</thead>
<tbody>
<tr>
<td>TIME PERIOD</td>
<td>1995 - 2012</td>
<td>-2.6</td>
<td>-0.8</td>
<td>-0.6</td>
<td>-1.2</td>
<td>-1.1</td>
<td>-1.5</td>
<td>-2.4</td>
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</tr>
<tr>
<td>TIME PERIOD</td>
<td>1995 - 2007</td>
<td>-3.7</td>
<td>-4.0</td>
<td>-1.3</td>
<td>-5.8</td>
<td>-3.4</td>
<td>-3.9</td>
<td>-1.2</td>
<td>-4</td>
<td>0</td>
<td>-4.1</td>
<td>-2</td>
<td>-1.5</td>
<td>-2.8</td>
<td>-1.8</td>
</tr>
<tr>
<td>TIME PERIOD</td>
<td>2008 - 2012</td>
<td>-0.1</td>
<td>6.8</td>
<td>1.0</td>
<td>12.1</td>
<td>3.9</td>
<td>5.4</td>
<td>-2.2</td>
<td>1.4</td>
<td>5.3</td>
<td>-1.0</td>
<td>-0.2</td>
<td>5.8</td>
<td>3.7</td>
<td>-0.5</td>
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</tbody>
</table>


By analysing the reference period we can see that the trend of public expenditure pertaining to the section of general public services has a tendency toward decrease. The time period from 1995 to 2012 shows that thirteen out of fifteen countries have an average rate of decrease in public expenditure in category in question, and that only Portugal and Luxembourg have an average rate of increase. Nevertheless, prior to the escalation of economic crisis, the two countries did not show an increase, but Portugal experienced a decrease and Luxembourg stagnated. The third time period shows vast impact of economic crisis to public expenditure trends in general public services in which expenditure is increased. However, in observation of the overall period (1995 – 2012) a conclusion is drawn that despite economic crisis the „cost” of general public services in EU-15 countries generally decreased.

2.2. Social protection

Public expenditure in the function of social protection of the population indicates the scope of government spending on social welfare. Based on the level and trend of the flow of this type of expenditure we can determine the social aspect of a country and its tendency toward intervention and provision of relief for citizens under social risk. Social protection expenditure is countercyclic in character, having a flow in opposite direction to economic growth. Social protection expenditure includes outlays on unemployment compensation, pensions, disability and illness benefits, and spending on the social policy of family allowance. Social protection also includes outlays on all government programmes for poverty alleviation. Social protection represents a considerable volume of public expenditure and the most important factor

8 Ibid, pp. 106–110.
in state welfare. The EU-15 countries, as well as other member states, showed a tendency toward a welfare state by ratifying the revised European Social Charter in 1996 (original Charter entered into force in 1961). The European Social Charter sets forth fundamental social rights of citizens such as the right to working relations and conditions, the right to healthcare and social protection and similar. A special part of the Charter relates to poverty alleviation, unemployment protection and protection from social exclusion. The governments signatory of the European Social Charter complied with establishing a system of social protection and provision of social security for their citizens (Article 12 of the Charter).

The scope of social protection of the EU-15 countries can be seen in Table 4, which shows the trend of public expenditure flows related to social protection.

Table 4. Average constant rates of change in public expenditure on social protection (%)  

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>Belgium</th>
<th>Denmark</th>
<th>Germany</th>
<th>Ireland</th>
<th>Greece</th>
<th>Spain</th>
<th>France</th>
<th>Italy</th>
<th>Luxembourg</th>
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<th>Portugal</th>
<th>Finland</th>
<th>Sweden</th>
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</thead>
<tbody>
<tr>
<td>1995 - 2012</td>
<td>0,6</td>
<td>0,0</td>
<td>-0,3</td>
<td>1,7</td>
<td>1,4</td>
<td>1,2</td>
<td>0,8</td>
<td>0,9</td>
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<td>-0,5</td>
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<td>2,9</td>
<td>-0,1</td>
<td>-1,2</td>
<td>0,5</td>
</tr>
<tr>
<td>1995 - 2007</td>
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<td>-0,5</td>
<td>-0,8</td>
<td>-0,4</td>
<td>-0,9</td>
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<td>-0,6</td>
<td>-2,1</td>
<td>-0,8</td>
<td>2,3</td>
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<td>-0,9</td>
</tr>
<tr>
<td>2008 - 2012</td>
<td>3,7</td>
<td>2,9</td>
<td>0,1</td>
<td>7,5</td>
<td>5,6</td>
<td>6,3</td>
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<td>4,3</td>
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<td>0,4</td>
<td>17,2</td>
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</tbody>
</table>


Table 4 shows that expenditure on social protection has either a declining or stagnating trend in the period from 1995 to 2007 (except Portugal), and that the onset of economic crisis signifies a considerable turning point. The expenditure trends from 2008 to 2012 show that all countries of the EU 15 had an average rate of increase in public outlays relating to social protection, which confirms the countercyclical character of this type of public expenditure. The trend of increase during economic crisis is so considerable that for the overall reference period (1995 – 2012) only four countries managed to maintain the flow they had until 2007, while others experienced an increase in social protection outlays. The causes of such a trend can be found primarily in the global crisis, which started in 2007 in the USA and spread the following year to European countries, having the most adverse affect on the economy and citizens in 2009 and 2010. The economic crisis caused a decline of economic growth, leading to a decrease in employment. The decreasing trend of expenditure in the 1995 – 2012 time period would have probably continued, if it hadn’t been for the escalation of economic crisis, resulting in high unemployment rates, which led all countries to intervene and provide relief in terms of social benefits. The increase of public expenditure on social protection can be directly contributed to economic crisis and recession, because other factors pertaining to social protection expenditure, such as pensions and disability and illness benefits did not show such a dramatic increase in specific years, nor were they so volatile in the short term.

2.3. Education

Public expenditure on education includes all government expenditures, especially those relating to pre-primary education (preschool institutions and similar), primary and secondary school education, and tertiary education. Education outlays also include postsecondary nontertiary education as well as adult education. We can generally define that public expenditures on education are all government outlays on education services for citizens, whether vocational or tertiary, including preschool age⁹. Table 5 below shows the flow of public expenditures on education.

Table 5. Average constant rates of change in public expenditure on education (%)  

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>Belgium</th>
<th>Denmark</th>
<th>Germany</th>
<th>Ireland</th>
<th>Greece</th>
<th>Spain</th>
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<th>Portugal</th>
<th>Finland</th>
<th>Sweden</th>
<th>United Kingdom</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995 - 2012</td>
<td>0,4</td>
<td>0,8</td>
<td>-0,1</td>
<td>0,1</td>
<td>2,3</td>
<td>-0,1</td>
<td>0,0</td>
<td>-0,4</td>
<td>1,4</td>
<td>0,6</td>
<td>-0,2</td>
<td>0,3</td>
<td>-0,5</td>
<td>-0,1</td>
<td>1,9</td>
</tr>
<tr>
<td>1995 - 2007</td>
<td>-0,3</td>
<td>-0,3</td>
<td>-1,0</td>
<td>-0,6</td>
<td>2,8</td>
<td>-0,4</td>
<td>-0,7</td>
<td>0,2</td>
<td>-0,3</td>
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<td>0,8</td>
<td>-1,7</td>
<td>-0,3</td>
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</tr>
<tr>
<td>2008 - 2012</td>
<td>2,1</td>
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<td>2,1</td>
<td>1,7</td>
<td>1,1</td>
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<td>1,5</td>
<td>-1,0</td>
<td>2,2</td>
<td>0,4</td>
<td>0,5</td>
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</tbody>
</table>


The data for the 1995 - 2012 time period show that EU-15 countries mostly had an average rate of increase, and that six countries had an average rate of decrease in public outlays on education, while the rate in France stagnated. The trend in the 1995 – 2012 time period shows that countries experienced a decrease in outlays on education until the economic crisis, and after 2007, shown by the 2008 – 2012 time period, there was a trend of increase in education outlays in most EU-15 countries. The causes of increase and decrease in education outlays can hardly be determined without a more detailed research and analysis into each individual country. The influence of subjective factors in each country (for example the level of education of the population or that of technological advancement) is much too high and prevents from a synthesized conclusion. What can only be observed is the unusual countercyclic character of expenditure on education in the 2008 – 2012 time period.

2.4. Health

Expenditure on health includes all outlays made by the government relating to health services in the widest meaning of the concept. Health outlays include general and specialised medical services, i.e. primary, secondary and tertiary health care, and other medical treatments (including medical products) financed by the government. Total expenditure on health also includes the costs of monitoring and coordination of the national public health system\(^\text{10}\). Health protection, as well as social, represents one of the fundamental citizen rights determined by the European Social Charter. Right to protection of health (Article 11) and medical assistance (Article 13) have a special emphasis in the Charter. According to the Charter, the governments signatory are obliged to establish and maintain a system of health protection, available to all citizens, whether in their own arrangement or in cooperation with private organisations.

Table 6. shows that absolutely all EU-15 countries, with the purpose of providing health services to their citizens, had a trend of increase in outlays on health. Public expenditure relating to health services is the only type of expenditure experiencing increase in all EU-15 countries without exception in the reference period. Noteworthy is the indicator of health outlay trend in the 1995 – 2007 time period, showing increase in health outlays in almost all countries (except Luxembourg). The period after the onset of economic crisis shows that eleven countries had a higher increase trend in health outlays in comparison to the 1995 – 2007 time period, and that only Greece and Portugal had a trend of decrease in health outlays, while Ireland maintained an identical trend.

Table 6. Average constant rates of change in public expenditure on health (\%)

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>Belgium</th>
<th>Denmark</th>
<th>Germany</th>
<th>Ireland</th>
<th>Greece</th>
<th>Spain</th>
<th>France</th>
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<th>Luxembourg</th>
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<th>Sweden</th>
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</thead>
<tbody>
<tr>
<td>TIME PERIOD</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1995 - 2012</td>
<td>1,8</td>
<td>1,7</td>
<td>0,7</td>
<td>1,2</td>
<td>2,1</td>
<td>1,0</td>
<td>0,9</td>
<td>1,8</td>
<td>0,5</td>
<td>3,7</td>
<td>0,1</td>
<td>0,8</td>
<td>1,8</td>
<td>0,9</td>
<td>0,5</td>
</tr>
<tr>
<td>1995 - 2007</td>
<td>1,0</td>
<td>1,2</td>
<td>0,3</td>
<td>1,2</td>
<td>3,5</td>
<td>0,6</td>
<td>0,6</td>
<td>2,0</td>
<td>-0,6</td>
<td>3,5</td>
<td>-0,3</td>
<td>1,7</td>
<td>0,6</td>
<td>0,6</td>
<td>-0,9</td>
</tr>
<tr>
<td>2008 - 2012</td>
<td>3,6</td>
<td>3,0</td>
<td>1,6</td>
<td>1,2</td>
<td>-1,2</td>
<td>1,9</td>
<td>1,8</td>
<td>1,5</td>
<td>3,3</td>
<td>4,2</td>
<td>1,1</td>
<td>-1,4</td>
<td>4,5</td>
<td>1,6</td>
<td>17,2</td>
</tr>
</tbody>
</table>


2.5. Economic affairs

Economic affairs include all government outlays pertaining to the general supervision, coordination and administration of economy by the government as well as coordination of specific strategic economic areas. General outlays include administration costs and all subsidiary costs incurred in support of the economic sector, such as financing institutions for patent rights protection, normative standards, company registration and similar. Noteworthy is that general economic affairs also include outlays on implementation of government policies relating to labour affairs, especially in terms of implementation of standards relating to working hours, minimal wages, safety etc.\(^\text{11}\) The specific subsections include the wider area of agriculture (including hunting, fishing and forestry), fuel and energy (oil derivatives, natural gas, nuclear fuel etc.), mining (including manufacturing and construction), transport (including all transport channels; road, water etc.), communication (ICT) and other industrial branches (hotels and restaurants, distribution, tourism and multipurpose development projects). All the mentioned sectors also relate to outlays on research and development carried out by government entities.

\(^{10}\) Ibid, pp. 97–101.
\(^{11}\) Ibid, pp. 85–94.
Table 7 shows the variations in trends of economic affairs expenditures between individual countries of the EU-15 in the period from 1995 to 2012. If we observe the time period before the economic crisis we can see that more than half of the observed countries had a trend of decrease in outlays on economic affairs. This leads to a conclusion that the aim of the EU-15 countries before recession was to diminish government interventionism in economy and that upon the onset of recession the countries were forced to intervene in economic affairs in order to stabilise economy (except Greece, Italy and Portugal). An extreme example of such a policy is Ireland, where government outlays reached 25% of the GDP in 2010, mostly with the purpose of stabilising and saving the financial sector that crumbled due to the real estate market.

Table 7. Public expenditure on economic affairs expressed as % of GDP

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>Belgium</th>
<th>Denmark</th>
<th>Germany</th>
<th>Ireland</th>
<th>Greece</th>
<th>Spain</th>
<th>France</th>
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<th>Luxembourg</th>
<th>Netherlands</th>
<th>Austria</th>
<th>Portugal</th>
<th>Finland</th>
<th>Sweden</th>
<th>United Kingdom</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995-2012</td>
<td>4,5</td>
<td>-0,2</td>
<td>0,4</td>
<td>11</td>
<td>-1,2</td>
<td>2,6</td>
<td>-1,2</td>
<td>0,4</td>
<td>2,1</td>
<td>0,9</td>
<td>2,1</td>
<td>-2,7</td>
<td>-3,1</td>
<td>-1,3</td>
<td>2,4</td>
</tr>
<tr>
<td>1995-2007</td>
<td>3,6</td>
<td>2,4</td>
<td>-0,5</td>
<td>0,2</td>
<td>-0,8</td>
<td>-0,8</td>
<td>-2,8</td>
<td>1,7</td>
<td>2,1</td>
<td>0,4</td>
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<td>-1,6</td>
<td>-5,3</td>
<td>-2,8</td>
<td>1,8</td>
</tr>
<tr>
<td>2008-2012</td>
<td>6,6</td>
<td>5,2</td>
<td>2,6</td>
<td>36,9</td>
<td>-2,4</td>
<td>10,5</td>
<td>2,7</td>
<td>-2,7</td>
<td>2,2</td>
<td>2,1</td>
<td>3,6</td>
<td>-5,5</td>
<td>2,2</td>
<td>2,1</td>
<td>3,8</td>
</tr>
</tbody>
</table>


2.6 Other types of public expenditure

The remaining five COFOG categories are viewed summarily under the section “other types” due to the small share in total public expenditures they have all EU-15 countries. This section consists of the amounts of outlays on culture, defence, public order and safety, environmental protection and housing and communal amenities. The five COFOG categories of public expenditure of the EU-15 summarily flow at the average level of around 10% of the GDP (Revenue statistics). Public expenditure on culture, religion and recreation include outlays on public services and organisations, together with programmes for culture and recreation (sport), while the outlays on religion relate to support, i.e. government relief and subventions to religious communities. The level of expenditure depends on the level of government intervention in the area of culture and sport, the rule being that governments participate with minimal activity in the religious activities of citizens, without interfering in their individual choices and practicing social secularisation. Outlays on housing and communal amenities include costs of housing and community developments and supply of water and street lighting. These outlays include supervision of the implementation and coordination of strategic plans related to housing. Also, this section includes outlays on subventions and grants for housing projects, while all types of outlays to citizens, in terms of benefits and relief in resolving housing issues, belong to the social protection subsection. Environmental protection primarily includes waste management and waste water management, with the highest financial share, while a lesser share pertains to measures for pollution abatement and protection of biodiversity and landscape. Outlays on management of waste and waste waters include all materials and labour costs for operation of the system, and especially costs of construction and maintenance of systems for waste and waste water management. The fourth subsection, the expenditure for public order and safety, includes outlays on police, including material costs and salary costs, as well as staff training if designed only for them. Public order and safety also includes the judiciary system in the widest sense possible including law courts and the prison system. The last COFOG subsection in this category is made up of outlays on defence and represents public expenditure carried out for external defence, i.e. military defence. These are outlays on military and all its services. The public expenditure trend for the other types category shows a decline in most EU-15 countries. In the 1995 – 2007 time period two thirds of countries show a tendency toward a decrease in outlays in question, and especially interesting is that certain countries who were affected by economic crisis more severely sought out ways to diminish total expenditure in exactly this category (Ireland, Spain, Greece), which can be seen from trends related to the 2008 – 2012 time period.


Ibid., pp. 96–97.

Ibid., pp. 94–95.
Table 8. Average constant rates of change for other types of public expenditure

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>Belgium</th>
<th>Denmark</th>
<th>Germany</th>
<th>Ireland</th>
<th>Greece</th>
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<tbody>
<tr>
<td>TIME PERIOD</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>1995-2012</td>
<td>0,0</td>
<td>-0,7</td>
<td>-1</td>
<td>-0,3</td>
<td>2,6</td>
<td>-1,1</td>
<td>0,3</td>
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<td>-2,8</td>
<td>-2,2</td>
<td>-0,5</td>
<td>-1,3</td>
<td>-3,6</td>
<td>0,0</td>
</tr>
<tr>
<td>1995-2007</td>
<td>-0,6</td>
<td>0,6</td>
<td>-1,4</td>
<td>2,3</td>
<td>3,7</td>
<td>-1</td>
<td>0,3</td>
<td>0,2</td>
<td>-0,9</td>
<td>-4,2</td>
<td>-2,8</td>
<td>-0,3</td>
<td>-3,2</td>
<td>-4,6</td>
<td>0,3</td>
</tr>
<tr>
<td>2008-2012</td>
<td>1,3</td>
<td>-0,8</td>
<td>-0,1</td>
<td>-6,6</td>
<td>0,1</td>
<td>-2,8</td>
<td>0,3</td>
<td>0,2</td>
<td>3,4</td>
<td>0,5</td>
<td>-0,8</td>
<td>-0,9</td>
<td>3,1</td>
<td>-1,1</td>
<td>-0,8</td>
</tr>
</tbody>
</table>


3. CONCLUSION

Government fiscal policy is a coordinated and complex process depending on a great variety of factors. In this paper, we studied the fiscal activities of the EU-15 countries from 1995 to 2012 focusing on public expenditure and its resilience to global economic crisis. Among the observed EU-15 countries, based on the carried out study, nine of them were identified as increasing their public expenditures in relation to gross domestic product from 1995 to 2012, while the six remaining countries decreased public expenditures. The analytical and synthetic analysis of these countries determined that the economic crisis had a significant impact on the public expenditure flows of the EU-15. By 2008 additional four countries had an average annual rate of decrease in public expenditure, thus from 1995 to 2007 as many as thirteen out of fifteen countries experienced a decline in the level of public expenditure. The escalation of economic crisis brings forth a dramatic increase in public expenditures in all EU-15 countries, so that in the end of the reference time period only six in the group remained with a lower level of public expenditure. The trend analysis of the three different time periods numerically showed the impact of the crisis and intensity of disorder in public finances in EU-15 countries. Outlays on general public services, social protection, education, health and economic affairs demonstrated a countercyclic character during global economic crisis (2008 – 2012), except individual countries most affected by crisis and forced to implement a cost-saving policy. The category of other types of public expenditure demonstrated a relatively procyclic character in relation to economic crisis. The Maastricht criteria, intended for the prevention of crisis scenarios and established as specific stabilization instruments, only partly influenced the fiscal discipline of the countries, and the emergence of economic crisis showed their weaknesses and disadvantages, which the EU tried to amend by additional measures after the crisis. The global economic crisis demonstrated the true meaning of balanced and stable public finances, which do not entirely rely on Keynesian principles, because the countries tending toward a decrease in public expenditure until 2008 were more resilient to the impact of the crisis and had a larger number of fiscal instruments available to defuse the consequences of the crisis.

LITERATURE

5. IME, Government Finance Statistics Manual (2001), Anex to Chapter 6, Classification of the Functions of Government

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COST-BENEFIT ANALYSIS OF GREEN ROOFS IN A DISTRICT OF BUDAPEST
GABRIELLA DARÁZS
ISTVÁNNÉ HAJDU

ABSTRACT
More and more green roofs are built all over the world irrespectively of climatic conditions. They are capable of reducing the anticipated effects of climate change and urbanization.

Several studies have already been made analysing one or more advantages of green roofs (water retention, insulation, noise muffling, provision of new habitats for flora and fauna), but only some of them tries to quantify these advantages. Besides, we need to deal with advantages of green roofs, it is also important to show exact figures. Decision makers and investors are interested in not only the fact that green roofs are able to retain rainwater, increase insulation or building’s life span, but the extent of these factors and the required expenditure. That is the reason why we need to collect the incentives and quantify them.

In the case of Budapest, most of the districts are suitable to make a study and a survey of existing green roofs and roofs that suitable for establishing green roof onto that can help us providing their advantages by figures. Collecting figures in a district regarding to water retention, insulation, noise muffling etc. makes possible to quantify the contribution to environmental development when each feasible green roofs are built. In respect to non-quantified figures (recreation value, improved working conditions) interviews or questionnaires help us to get useful information.

Summarizing these figures a comprehensive study could be made for investors and decision makers such as an incentive tool on proving the worth of building a green roof on each suitable roof.

KEY WORDS: green roofs, cost-benefit analysis, quantified-, non-quantified figures.

1. INTRODUCTION
Green roofs as building constructions has a great importance in serving a good example of how growing passive building surfaces can be utilized with them and therefore bring nature back into people’s life. Moreover, they are also capable of reducing the anticipated effects of climate change and urbanization. Growing cities worsen the quality of living conditions (as air/water pollution, noise etc....). Green roofs could be a good solution for these; to prove/confirm it we need to collect incentives and quantify them too. Summarizing these figures a comprehensive study could be made for investors and decision makers such as an incentive tool on proving the worth of building a green roof on each suitable roof. That’s why cost-benefit analysis is very important. The main points this analyse will talking about are firstly about green roofs in generally, secondly about cost-benefit analysis of green roofs and finally about CBA in the case of our study.

2. GREEN ROOFS IN GENERALLY
In spite of the different features of roofs and environment, different type of green roofs could be applied, but basically green roof usually has basic structure which is illustrated with this picture (Figure 1.).

Figure 1. Green roof structure (http://newyork.thecityatlas.org/lifestyle/green-roofs-101/)
Basically, two types of green roofs can be mentioned; the extensive and the intensive one. The differences between the two types are based upon slope and maximum load of roofing, thickness of growing medium, type of watering, and vegetation.

Table 1. Types of green roofs (based on Minke 2009)

<table>
<thead>
<tr>
<th></th>
<th>Intensive</th>
<th>Extensive</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Slope of Roofing</strong></td>
<td>max. 10°</td>
<td>0-25°</td>
</tr>
<tr>
<td><strong>Load of Roofing</strong></td>
<td>2,5-15 kN/m³</td>
<td>0,5-2 kN/m³</td>
</tr>
<tr>
<td><strong>Thickness of Structure</strong></td>
<td>min 25 cm</td>
<td>max 15 cm</td>
</tr>
<tr>
<td><strong>Type of Watering</strong></td>
<td>irrigation plant</td>
<td>rain water</td>
</tr>
<tr>
<td><strong>Vegetation</strong></td>
<td>ornamentals, crop, tree</td>
<td>perennial, succulents, xerophilous plants</td>
</tr>
<tr>
<td><strong>Utilization</strong></td>
<td>public park</td>
<td>impassable</td>
</tr>
</tbody>
</table>

In the case of green roofs, we can talk about lots of effects which have significant environmental and physiological roles. Application of green roofs is a useful way of economical and eco-friendly building method, since they

- reduce the rate of built-up and unbuilt areas,
- produce oxygen and set carbon dioxide,
- filter/swallow dust and pollutants from air,
- reduce warming up of roofing thus moderate flushing dust,
- moderate temperature change between day and night,
- function as heat insulation,
- arrest rain water runoff, thus relieve sewerage system,
- increase the value of the building, vegetation create recreation value (Minke 2009).

3. COST-BENEFIT ANALYSIS

It’s necessary to quantify functions of green roofs. The most common and best way to do this is the cost-benefit analysis (CBA). Using this method, not only advantages but building and maintenance costs could be also taken into consideration (Claus, Rousseau, 2012). CBA has positive and negative side which contains:

**Positive:**
- Reduction in energy cost
- Increasing life span of roof
- Improvement air quality
- Water retention
- Fire protection and noise muffling
- Recreation value

**Negative:**
- Investment-, installation-, maintenance costs
- Further training of personnel
- Costs of using public funds to finance subsidy

Most of the functions can be easily quantified but some of them not. The next table shows functions separated by two groups the quantified and non-quantified figures (Clements, J., 2013).

Table 2. Quantified and non-quantified figures

<table>
<thead>
<tr>
<th>Quantified figures</th>
<th>Non-quantified figures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased life span of the roof covering</td>
<td>Improving living conditions</td>
</tr>
<tr>
<td>Reduction in energy cost</td>
<td>Recreation value</td>
</tr>
<tr>
<td>Improving air and water quality</td>
<td>Employee satisfaction/ less stress/effective working</td>
</tr>
<tr>
<td>Increased property value and rents</td>
<td>Biodiversity</td>
</tr>
<tr>
<td>Subsidies/incentives</td>
<td></td>
</tr>
</tbody>
</table>
Collecting figures in a district regarding to water retention, insulation, noise muffling etc. makes possible to quantify the contribution to environmental development when each feasible green roofs are built. In respect to non-quantified figures (recreation value, improved working conditions) interviews or questionnaires help us to get useful information.

In the case of Budapest (capital city of Hungary), most of the districts are suitable to make a study and a survey of the already existing green roofs and the roofs that suitable for establishing green roof onto that can help us providing their advantages by figures. There are some areas in Budapest where noise or air pollution is very high that’s why these areas are suitable to analyse effects of green roofs that could be built there.

When we build a green roof, it has beneficial result for roof covering. Thereby green roof protect the roof from environmental effects (storm, temperature, UV), life span of roof covering is increased. Naturally, as in the case of another figures, life span of roof depends on the type of green roof and thickness of layers. Thicker growing medium means higher protection. But most of the case life span of roof increased by 40-50 year against 25 years of average roof (Claus, 2012). Because of this protection not only the life span of the roof is increased but the decreased repairs could reduce the maintenance costs too.

Because of good ability in insulation green roofs contribute to reduction in energy used for heating and cooling too. In summer green roofs do not allow to get warm and in winter to cool down the roof that’s why less cooling and heating energy needed. Naturally the energy needs depends on more factor such as regional climate (temperature, humidity, wind), type of building (number of floors), and the type of growing medium (thickness, used materials). In average a green roof can reduce the energy demand by 10% used for heating and cooling the building (Clements, J., 2013). Besides insulating the walls of a building, it’s also necessary to cover the roof as well, most of the heat leave through walls (35%) and roof (25%).

Planted vegetation influences the air quality by absorption. To the highest degree it influence to the CO$_2$ emission by absorption and the reduction in energy used in buildings. The plants influence capacity of another air pollutant such as nitrogen-oxide, ozone or particulates. In Budapest the most polluted (air, noise) areas are in the inner districts and near the interchanges.

Green roofs can influence the quality and quantity of water runoff by the growing medium and filter its pollutant. The thickness of growing medium, the slope of the roof and the type of vegetation influence the ability of water retention. An average roof retain only 5-10% of rain water while an extensive roof 50% and an intensive roof 60-70% (Belovics, L., 2007).

Thanks for larger green surface green roofs contribute to improve air and water quality (absorption of air and water pollutant), adjust humidity and decrease noise. That’s why it could provide a good environment not only for the inhabitants but in the case of office buildings for employees (../ for the inhabitants and the people living or working in it e.g. office workers, or children in kindergarten or school). Decreasing noise by 10 dB could prevent such unwanted side-effects as stress, bad sleeping or decreasing work efficiency (Nurmi et al., 2013). In addition the lower noise causes better judgement of property and increase the value and demand of it. Several studies prove that green infrastructure could influence employees. It causes more satisfaction, less disease and stress. In a big city green infrastructure could provide recreation value for both inhabitants and employees.
In conclusion the different type of parameters could influence figures that’s why it’s time-consuming to make analysis but it could encourage investors or decision makers to build more green roofs.

LITERATURE


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MULTIDISCIPLINARITY IN A GLOBALIZED WORLD – CONTEMPORARY CHALLENGES
ZORAN JAŠIĆ
STIPE BUZAR

ABSTRACT
Multidisciplinarity has become a fundamental condition for business in a globalized world. Survival in a world of growing interdependence through modernization and technological development demands that scientists and business people should be able to synthesize elements from different fields of business and science. Ultimately, this means that global economic problems cannot be solved without a multidisciplinary approach that involves not only knowledge of classical economics and finance, but also knowledge and understanding of different cultures, ideologies, civilizations and worldviews. The authors attempt to identify which elements from various disciplines spanning across the natural sciences, social sciences and humanities, are necessary for obtaining global economic goals, especially the Millennium goals of the United Nations. All of the eight millennium goals, such as the eradication of poverty, universal primary education, combating deadly diseases, environmental sustainability etc., have an economic basis, but cannot be achieved without a multidisciplinary synthesis of elements from other scientific fields. Because of this, the authors put special emphasis on the Macrowikinomics approach as a new format for achieving the economic Millennium goals set by the United Nations.

KEY WORDS: Millennium development goals, globalization, extreme inequality, clinical economics, macrowikinomics, multidisciplinarity.

1. INTRODUCTION
The modern phenomenon of globalization has given birth to a colorful set of occurrences, events and agendas. Although it is a centuries old phenomenon beginning with the rise of economic, political and maritime power of Early Modern Age mercantile states, modern globalization is said to begin after World War II, taking great strides immediately after the end of the Cold War. At the beginning of the 1990’s economic development becomes connected with the idea of the global spread of capitalism, democracy, and Western values, (Fukuyama, 1992) and ‘globalization’ soon becomes a household term. In the political and economic environment of the 1990’s, with the United States being perceived as the sole leader of Western and global political, economic, industrial, legal, moral, and other trends, the opinion was formed that the spread of capitalism and democracy across the globe can solve most of the world’s economic and social problems. The peak of this optimistic period of recent history finds its incarnation in the Millennium Development Goals (MDG’s) set by the United Nations in the year 2000.

The goals of this paper will be to first (2) briefly examine the success of achieving MDG’s in the period from 2000 - 2015, and reduce the 8 MDG’s to the goal of eliminating extreme inequalities in the global distribution of wealth. Second, (3) to argue that the way to achieve this goal is not by implementing top-down approaches from international financial organizations (IMF, WB etc.) and wealthy states to poor and developing economies, but rather by applying what Jeffrey Sachs (2005) has named clinical economics. Third, (4) to argue that Sachs concept of clinical economics may be successful with the implementation of the so called Macrowikinomics approach which enables a versatile approach to alleviating economic crises, and functions as a multidisciplinary approach between business, science, politics, and non-governmental volunteer initiatives. It will also be important to emphasize that such massive endeavors as reducing extreme inequality have only been made possible by the technological and other factors that accompany and facilitate globalization processes. It should be understood that the goals set in this paper are intended as a blueprint for a much larger study.

2. MILLENIUM DEVELOPMENT GOALS AND EXTREME INEQUALITY
In September 2000, the member states of the UN made a significant change in their policies. Rather than focusing on the wellbeing of states in the international system, they decided to put individuals into the center of their interests. (Doyle & Stiglitz, 2014) They did this, at least in a formal capacity, by publishing and signing the Millennium Declaration. (United Nations, 2000) By 2001, the resolution had given the impetus for the formulation of eight millennium development goals, and a somewhat larger number of concrete targets that were supposed to be arrived at by 2015. The eight goals, and their respective targets were to (United Nations Millennium Development Goals):¹

• Eradicate extreme poverty and hunger
  • Halve, between 1990 and 2015, the proportion of people whose income is less than $1.25 a day
  • Achieve full and productive employment and decent work for all, including women and young people
  • Halve, between 1990 and 2015, the proportion of people who suffer from hunger

• Achieve universal primary education
  • Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling

• Promote gender equality and empower women
  • Eliminate gender disparity in primary and secondary education, preferably by 2005, and in all levels of education no later than 2015

• Reduce child mortality
  • Reduce by two thirds, between 1990 and 2015, the under-five mortality rate

• Improve maternal health
  • Reduce by three quarters, between 1990 and 2015, the maternal mortality ratio
  • Achieve, by 2015, universal access to reproductive health

• Combat HIV/AIDS, malaria, and other diseases
  • Have halted by 2015 and begun to reverse the spread of HIV/AIDS
  • Achieve, by 2010, universal access to treatment for HIV/AIDS for all those who need it
  • Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases

• Ensure environmental sustainability
  • Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources
  • Reduce biodiversity loss, achieving, by 2010, a significant reduction in the rate of loss
  • Halve, by 2015, the proportion of the population without sustainable access to safe drinking water and basic sanitation
  • Achieve, by 2020, a significant improvement in the lives of at least 100 million slum dwellers

• Develop a global partnership for development
  • Develop further an open, rule-based, predictable, non-discriminatory trading and financial system
  • Address the special needs of least developed countries
  • Address the special needs of landlocked developing countries and small island developing States
  • Deal comprehensively with the debt problems of developing countries
  • In cooperation with pharmaceutical companies, provide access to affordable essential drugs in developing countries
  • In cooperation with the private sector, make available benefits of new technologies, especially information and communications

According to the UN's latest report on MDG's, some of the mentioned targets have been met (The Millennium Development Goals Report 2014, p. 4):
• The world has reduced extreme poverty by half
• Efforts in the fight against malaria and tuberculosis have shown results
• Access to an improved drinking water source became a reality for 2.3 billion people
• Disparities in primary school enrolment between boys and girls are being eliminated in all developing regions
• The political participation of women has continued to increase
• Development assistance rebounded, the trading system stayed favourable for developing countries and their debt burden remained low

These are all very plausible accomplishments, and indeed, the report indicates that there has been important progress in most of the areas mentioned in the Millennium Declaration. However, in most of these areas there is a great need for further effort in fully meeting the desired goals and targets (The Millennium Development Goals Report 2014, pp. 4-5):
• Major trends that threaten environmental sustainability continue, but examples of successful global action exist
• Hunger continues to decline, but immediate additional efforts are needed to reach the MDG target
• Chronic undernutrition among young children declined, but one in four children is still affected
• Child mortality has been almost halved, but more progress is needed
• Much more needs to be done to reduce maternal mortality
• Antiretroviral therapy is saving lives and must be expanded further
• Over a quarter of the world’s population has gained access to improved sanitation since 1990, yet a billion people still resorted to open defecation
• 90 per cent of children in developing regions are attending primary school

One can make a prima facie conclusion that the goals have been partially attained, but that the world is far from the ideal that was set by the Millennium Declaration, while the 2015 deadline is at our doorstep. There is hope, but very little certainty that they will be achieved fully in another fifteen years. We would like to suggest that this is because, while the goals themselves are more than praiseworthy, they suffer a tragic flaw – they simply miss the point they are trying to make. Of course, a better world would be one without famine, discrimination, humanitarian and ecological disasters etc., but such a world cannot be found unless we address the cause of the disease rather than merely alleviating the symptoms. In another fifteen years some of the goals may reach completion, yet some of them may be farther from our grasp then they ever were. The only solution can be to find the common denominator of all eight goals and treat it as the cause of the problems that the United Nations have set out to solve. We believe this common denominator to be extreme inequality, the eradication of which should be set as the primary goal of all efforts. Thus, the treatment and eradication of extreme economic inequalities would mean addressing the cause, and not simply the symptoms behind the problems that the MDG’s are aimed at solving. Of course, this does not mean that the symptoms would not require some additional treatment of their own, but once the problem of extreme inequality would be solved to a satisfying degree, the MDG’s could be addressed far more systematically, and bring about more long-term solutions.

Michael Doyle and Joseph Stiglitz (2014) consider the eradication of extreme inequality as important enough to be added to the original list of MDG’s, thus increasing their number to nine. They call this goal the sustainable development goal. They do not plead for the establishment of complete equality between the economies of the world. In fact, they maintain that some degree of inequality may even be conducive to economic growth,1 while in some aspects complete equality would present an infringement on certain freedoms. However, one can make a prima facie conclusion that the goals have been partially attained, but that the world is far from the ideal that was set by the Millennium Declaration, while the 2015 deadline is at our doorstep. There is hope, but very little certainty that they will be achieved fully in another fifteen years. We would like to suggest that this is because, while the goals themselves are more than praiseworthy, they suffer a tragic flaw – they simply miss the point they are trying to make. Of course, a better world would be one without famine, discrimination, humanitarian and ecological disasters etc., but such a world cannot be found unless we address the cause of the disease rather than merely alleviating the symptoms. In another fifteen years some of the goals may reach completion, yet some of them may be farther from our grasp then they ever were. The only solution can be to find the common denominator of all eight goals and treat it as the cause of the problems that the United Nations have set out to solve. We believe this common denominator to be extreme inequality, the eradication of which should be set as the primary goal of all efforts. Thus, the treatment and eradication of extreme economic inequalities would mean addressing the cause, and not simply the symptoms behind the problems that the MDG’s are aimed at solving. Of course, this does not mean that the symptoms would not require some additional treatment of their own, but once the problem of extreme inequality would be solved to a satisfying degree, the MDG’s could be addressed far more systematically, and bring about more long-term solutions.

Doyle and Stiglitz further outline the arguments that show the harmfulness of extreme inequalities. These are divided into three subcategories: economic, political and social. For the sake of brevity, we will only mention them here. The arguments are (Doyle & Stiglitz, 2014: p. 7):

• (E1) Increasing inequalities lessen aggregate demand, which can slow economic growth
  • Attempts to offset such negative effects can contribute to credit bubbles, which in turn lead to economic instability
• (E2) Economic inequalities manifest themselves as inequalities of opportunities, causing economic inefficiency and reduced development (because individuals are unable to live up to their potential)
• (E3) Countries with high inequality usually invest less in public goods, which contribute to long-term prosperity and growth
• (PS1) Inequalities affect fair political processes and policy making, because political leaders are more attentive to the needs of their more affluent constituents than to the poor ones. Thus, economic inequality is translated into political inequality.
• (PS2) There are substantial links between violence and “horizontal inequalities”, meaning that peace and order are destabilized when the rich strata of society come from one ethnicity, or race, or religious affiliation, and the poor come from another.

Based on these arguments, we can say that extreme inequalities truly are a massive problem in many of the world’s economies today. Of course, they cannot be solved with the same tools in every particular case. We believe that a good starting point might be in Jeffrey Sachs’ concept of clinical economics, which we will try to explain in the following chapter.

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1 This refers mainly to inequalities within a state, but has international repercussions.
2 Our italic.
3. CLINICAL ECONOMICS

Sachs’ clinical economics approach was initially created for alleviating crises in poverty-stricken countries, but as it is an approach to development economics, there is no a priori reason to doubt that it might be applied other development goals, such as alleviating extreme inequality in different countries.

In any case, Sachs’ clinical analogy with development economics is quite compelling because of its statement that the challenges faced by clinical medicine are comparable with the challenges of making policy recommendations for an economy. He states that there are five important lessons in clinical medicine of which we should take note: (1) the human body is a complex system; (2) that complexity requires a differential diagnosis; (3) all medicine is family medicine; (4) monitoring and evaluation are essential to successful treatment; (5) medicine is a profession, and as such requires a strong ethical code. (Sachs 2005: pp. 75-78) These lessons are important because development economists, usually working in international institutions such as the IMF and the World Bank, take on the overly simplistic view that the economic hardships of all poor countries can be alleviated by dealing with a very reduced set of variables such as poor governance, excessive government intervention in markets, excessive government spending etc. The solution to this set of variables is just as short, and usually consists of belt tightening, privatization, liberalization, and good governance. (Sachs 2005: pp. 81) Sachs maintains that this simplicity is to blame when it comes to the failure to eradicate extreme poverty in the world, and we speculate that the same might also count for the eradication of extreme inequality.

When making the analogy between clinical medicine and development economics we should draw from the lessons of the former by realizing the following five points to be true (Sachs 2005: pp. 79-81):

- Economies are complex systems and consist of elements such as transport, power, communications, law enforcement, taxation etc.
- Economists need to learn the art of differential diagnosis
- Clinical economics should view treatment in family terms, where ‘family’ denotes a country’s region and the rest of the world – this is assumed by MDG’s
- Development requires monitoring and evaluation with a rigorous comparison of goals and outcomes
- The development economics community does not take on its work with the sense of responsibility that the tasks require

Perhaps the most important of these five points is the one concerning the art of differential diagnosis. Namely, if the economy of any given country needs assistance or policy recommendations, Sachs suggest a detailed checklist (Table 1.) with a large number of considerations, from poverty mapping and commodity price fluctuations, to war, terrorism and cultural divisions, that need to be accounted for when dealing with the given situation.
Table 1. Checklist for Making a Differential Diagnosis

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<th>IV. Physical Geography</th>
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<td>• Transport conditions</td>
</tr>
<tr>
<td>• Proportion of households lacking basic needs</td>
<td>• Proximity of population to ports, international trade routes, navigable waterways</td>
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<tr>
<td>• Spatial distribution of household poverty</td>
<td>• Access of population to paved roads</td>
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<tr>
<td>• Spatial distribution of basic infrastructure (power, roads, telecoms, water and sanitation)</td>
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<td>• Ethnic, gender, generational distribution of poverty</td>
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<tr>
<td>• Key risk factors</td>
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</tr>
<tr>
<td>• Demographic trends</td>
<td>• Arable land per capita</td>
</tr>
<tr>
<td>• Environmental trends</td>
<td>• Environmental impacts of population land ratios</td>
</tr>
<tr>
<td>• Climate shocks</td>
<td>• Agronomic conditions</td>
</tr>
<tr>
<td>• Disease</td>
<td>• Temperature, precipitation, solar insolation</td>
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<tr>
<td>• Commodity price fluctuations</td>
<td>• Length and reliability of growing season</td>
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<tr>
<td>• Others</td>
<td>• Soils, topography, suitability for irrigation</td>
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<td></td>
<td>• Interannual climate variability (e.g., El Nino)</td>
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<td></td>
<td>• Long-term trends in climate patterns</td>
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<td>• Disease ecology</td>
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<td>• Human diseases</td>
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<td></td>
<td>• Internal violence and security</td>
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<td></td>
<td>• Cross-border violence and security</td>
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<td></td>
<td>• Ethnic, religious, and other cultural divisions</td>
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<td>• Overhang of public sector debt</td>
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<th>V. Governance Patterns and Failures</th>
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<tr>
<td>• Civil and political rights</td>
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<td>• Ethnic, religious, and other cultural divisions</td>
<td>• Participation in regional and international Groups</td>
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4. MACROWIKINOMICS AND MULTIDISCIPLINARITY

Sachs’ checklist makes it more than clear that the job of making a differential diagnosis of an economy is a multidisciplinary challenge. Solving the problems of poor economies is also a multidisciplinary task. Finally, when it comes to eradicating extreme inequalities, and that is the main subject of this paper, many or most of the elements of the above diagnosis play a vital role. However, most of these elements cannot be addressed with a classical macroeconomic approach, which is why we propose that the macrowikinomic approach, created by Dan Tapscott and Anthony D. Williams.

Tapscott and Williams maintain that with the spread of new technologies, at the vanguard of which stands the World Wide Web, the old way of doing business and politics is ending. It is a slow transition, not unlike the transition that occurred in Europe thanks to the invention of the printing press, but it is nonetheless taking place. Of course, there are important differences between the transition that started to take place in the renaissance and the one taking place today. While printing enabled the distribution of knowledge, and played a key role in the creation of capitalism and the industrial revolution, the Web enables individuals to collaborate and learn in completely new ways. In the process, it is also enabling new ways of creating global wealth. They claim that in the end “[…] we will look back at this period as a time when the world began a historic transition from industrial capitalism to a new kind of economy based on new principles and new ways of thinking and behaving.” (Tapscott & Williams 2010: p. 24) However, this must be taken cum grano salis. Tapscott and Williams do not claim that the old institutions of government, business, education, health care etc. will disappear. Wikinomics is not “[…] a wholesale replacement for good government, the corporation, professional journalism, our health care systems, or our institutions of higher learning.” (Tapscott & Williams 2010: p. 25) It is not an attempt to replace capitalist economics with some kind of web-based collectivism. In fact, they maintain that most of the things their approach touches upon should stay the same, and some of these are:

- financial markets and corporations as the engines of innovation, prosperity and job creation
- governments as tax collectors, social security providers and enactors of the law
- universities as places of learning, advanced research, free thinking
- health care as a system where trained professionals treat sick patients
- professional journalism as the institution to which even the most advanced web users look towards for reliable information

However, the existence of the possibilities offered by new technologies show us that the conventional approaches to the above-mentioned elements are insufficient. Journalists have learned to co-exist, and in fact collaborate with independent bloggers, while “[…] self-organizing patient communities and a greater emphasis on education and preventative medicine are beginning to augment conventional health care. Organizations can succeed and even thrive in this new environment by embracing the five principles of wikinomics: collaboration, openness, sharing, integrity, and interdependence.” (Tapscott & Williams 2010: p. 26)

When Tapscott and Williams use the word ‘collaboration’, they refer to a completely new way of innovating, problem solving, and creating goods and services. An example should illustrate that point perfectly. The example involves a young astrophysicist who managed to enlist close to 300,000 amateurs worldwide, in order to help him identify and analyze new galaxies. By doing this, he has created a collaborative online society of people that have made massive breakthroughs that most astronomers cannot hope to achieve within the confines of their universities and research centers. More to that, the example shows that the age old contention that science cannot be “done” by amateurs, or that amateurs cannot contribute to in any meaningful way (except as test subjects), is indeed wrong. What this shows is that “[…] broad horizontal networks of participants can accomplish much more than one organization or one individual can acting alone.” (Tapscott & Williams 2010: p. 27) This does not mean that hierarchies and bureaucracies can or should disappear. However, it does mean that any approach to solving any global or regional problem, would do good to incorporate a collaborative element.

The ingrained habits of most institutions, with respect to sharing information, are secrecy and opacity. Companies shield their weaknesses and eventual transgressions, while governments guard information for the public, often claiming this is “in the best interest of the public.” This sort of behavior is becoming less possible every day as customers, citizens and employees are gaining access to the kind of knowledge they could not even dream of 20 years ago. A CEO or a government official can choose to acknowledge this fact in two different ways; either as a legal obligation to report to regulatory institutions, or as the essential ingredient of productive relationships. The point here is that the latter stance makes more sense inasmuch as opacity is becoming more difficult to maintain and may in time prove to be counterproductive and unprofitable.

Openness almost immediately entails sharing, that is, putting information, software, patents etc., into the public domain. Important research projects often have breakthroughs that open up enormous future research opportunities. But one company cannot pursue them all. Sharing the information provides the opportunity to thousands of independent researchers around the world to contribute to the research efforts. A company that puts such information into the public domain can always keep a competitive advantage, and the feedback they receive from a worldwide research community can help that company and others achieve their goals. This is not limited to patents and copyrights. Universities have started to share courseware, government agencies are sharing software code, and internet users everywhere are sharing unprecedented amounts of data and ideas.
In the new age of networked transparency, companies and other organizations are forced to act with integrity. They are forced to do so not merely because of institutional regulators and stakeholders, but by something far more powerful—transparency itself. As Tapscott and Williams put it: “[...] in an age of transparency all organizations need to transparency as a part of their DNA—not just to secure a healthy business environment, but for their own sustainability and competitive advantage.” (Tapscott & Williams 2010: p. 33)

Interdependence is not a necessity for effective business or government; it is a fact that must be acknowledged. Global interdependence, or what is sometimes simply called “globalization” has become “[...] a defining feature of our time as people, money, technology, products, services, culture, and ideas relentlessly cross borders in a vast network of transactions and social exchanges.” (Tapscott & Williams 2010: p. 34)

In short, the integration of these principles, with special emphasis on open and multidisciplinary collaboration by volunteers working around the globe on a wiki organizational basis, could be a new way of recruiting professionals and gifted amateurs in order to help struggling and poor economies. Wiki communities all over the world have shown that money is not the only, and perhaps not even the best motivator. Rather, it is the sense and satisfaction one can get from participating in a collaborative effort aimed at a goal that one firmly believes in.

5. CONCLUSION

We have gone from Millenium Development Goals and extreme inequality, through clinical economics, to macrowikinomics and multidisciplinarity. In all of this variety the main thread, or idea, of this paper might have gotten lost, so there is need to repeat it. The main idea was to advocate a different approach to dealing with the most pressing global economic and social issues as they were defined by the Millennium Declaration, but by defining the main cause of these problems the rise of extreme inequality both in domestic societies and at a global level. The only way to help any society attain a greater level of equality, thus stabilizing it and removing many of the problems addressed by the Millennium Declaration, is to treat every economy as a special case, in the same way that a clinical physician treats a patient. In order to treat one such economy, one must make a very specialized differential diagnosis that contains at least seven very complex sets of elements. But such tasks are more then daunting, and they usually fall within the domain of a small set of global institutions such as the World Bank and the IMF. We are not suggesting that we should have more such institutions, or that we should replace the existing ones. Rather, we mean to say that the existing institutions need to take a less top down approach and treat struggling economies and countries with a low level of equality as their patients. However, they cannot succeed in this by acting as an all knowing physician. They need the help of the patient herself. But more than that, they need the help of both professional and amateur independent researchers from all over the world. They can tap into this precious resource by employing the five principles of Wikinomics that will enable them to form a truly multidisciplinary approach, or better yet, set of approaches to the challenges they are facing. This is not to say that the mentioned institutions do not actually employ some of these principles to a certain degree (to which degree is a matter for another time and a different scholar), but that they need to employ them all to their fullest potential.

LITERATURE


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AN EFFICIENCY ANALYSIS OF CHOSEN ACTIVITIES OF SLOVAK MUNICIPALITIES
ZUZANA RIGOVÁ

ABSTRACT
Nowadays, economic efficiency of the public administration is a permanent topic in Slovakia. Local self-government is an important part of the public administration concerning the questions of local importance. Since January 1st 2002, some competencies were transferred from the state administration bodies to self-government ones with the aim to assure their rationalization and effective performance on the local level. One of the essential representatives of the local government is the municipality. The paper focuses on analysis of the municipality efficiency by using Data Envelopment Analysis. This non-parametric frontier analysis is suitable, particularly, in the case of comparing performance activities of non-profitable subjects. The results of the analysis help us to discover the activity shortages of observed and compared subjects which are due to this analysis considered to be inefficient.

KEY WORDS: local government, municipality, (in)efficiency, Data Envelopment Analysis.

1. INTRODUCTION
Since the collapse of socialism in 1989 till the present, the public administration in Slovakia (SR) has undergone significant transformation. Nowadays, we have dual and symmetrical model of public administration consisting of state and local government levels. Self-government is represented by two independent levels, the local and regional one. Regional level consists of 8 regions, local level consists of 2 892 local governments, 138 in cities and 2 753 in villages (1).

A representative of the local government is municipality which provides public administration on the local level, close to people knowing their needs and demands. A municipality performs its own original functions and competencies as well as the functions delegated from the state (for more details see Table 1).

In general, an economic efficiency is expressed by the relation of inputs (usually costs) and outputs (usually profit or total income, revenue) and optimization of this relation.

An expression of public administration efficiency is not a simple task, since public services are primarily based on the non-market principles. Public services are provided and distributed by the state and by administrative regional and local bodies (authorities) and their production does not reflect the principle of the demand and supply and the creation of maximum profit. Their existence (providing) is guaranteed by the constitution and by the laws.

Generally, an economic efficiency of a local government is expressed as the relation between input resources and their economic and social impacts. Since the local government should be aimed at the welfare of the citizens by using the minimum costs, it would be better to focus on the quality of services provided by local government. Inputs and outputs are usually expressed in different metric units. For instance, quantitative or finance indicators as inputs and profit or benefit as an output and they have not market prices (Papcunová, et al., 2006).

Table 1. Municipality responsibilities

<table>
<thead>
<tr>
<th>ORIGINAL RESPONSIBILITIES:</th>
<th>DELEGATED RESPONSIBILITIES:</th>
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<tr>
<td>Managing tangible and non-tangible property</td>
<td>Birth register</td>
</tr>
<tr>
<td>Preparing and approving budget and financial statements</td>
<td>Construction permitting</td>
</tr>
<tr>
<td>Deciding and administering of local fees and taxes</td>
<td>Healthcare (health centres and hospitals)</td>
</tr>
<tr>
<td>Regulating local economy activity</td>
<td>Preschools, elementary and art schools</td>
</tr>
<tr>
<td>Constructing and maintaining local roads, pavements and</td>
<td>Social care and services (retirement</td>
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<tr>
<td>public spaces (cemetery, public sport and cultural</td>
<td>homes)</td>
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<td>amenities)</td>
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<td>Investing and entrepreneurship for local development and</td>
<td>Water management</td>
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<td>public services</td>
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</table>
Creating, cancelling and managing own budgetary and subsidised organisations

Creating and protecting healthy environment

Providing conditions for healthcare, education, culture, art, sport and civic activities,

Providing public services (water supply, wastewater and waste treatment, cleanliness, greenery, illumination, public transport)

Providing social help.

Source: (1)

Municipal activities and financial management are defined and regulated by respective laws1. Delegated functions are financed by state funds and transfers, original functions are financed from the financial sources of municipality (shared taxes from the state, specific state grants and transfers and other revenues derived from the activities of municipality – tax and non-tax revenues, grants, loans, etc.). Each municipality must prepare and in cooperation with the municipal council approve municipal budget with a balanced financial plan, describing expected revenues and expenditures in detail. In the end of each financial year officials of the municipality propose the closing account, financial statement and other financial and economic documents (Kaliňák, M. et al., 2011).

In this paper we shall analyse the efficiency of performance of the municipalities by using Data Envelopment Analysis (DEA), which is very suitable, particularly, in the case of efficiency analysis of the non-profitable subjects. We hope, that this method help us to discover possible potential weaknesses or surpluses in activities of observed organisational units.

2. METHODOLOGY

Methodology is based on collection and analysis of publicly available relevant data concerning the chosen activities of municipalities. With regard to the functions and competencies of the municipality and obtained data we shall do following partial efficiency analyses of:

• property management,
• collection and administration of taxes and fees and
• efficient size of the municipal staff in relation to the size of municipality.

DEA is a mathematical programming – based technique for measuring the efficiency of a decision making unit (DMU) relative to all other DMUs and thus estimating the best one within compared DMUs. For each inefficient unit, DEA identifies the sources and level of inefficiency for all inputs and outputs (Luptáčik, 2010). It allows to involve the multiple inputs and outputs expressed in different units to this analysis. Result of the analysis is relative efficiency (score) for each DMU in the set, which is constrained to the range <0,1>. All DMUs with score equal to 1 are considered relatively efficient. For each inefficient DMU (score is less than 1) DEA provides a subset of peer group of DMUs (referential DMUs set) and set of targets (recommended projections of inputs and outputs).

With respect to the character and relationship between input and output data we apply BCC input and output oriented (BCC-I, BCC-O) models2 for our purposes.

We use the software DEA Solver (http://www.saitech-inc.com/Products/Prod-DSP.asp).

3. DATA AND VARIABLES

We have the powerful multi model calculating tool, but the crucial problem is to choose adequate input/output data which appropriately describes observed activities of DMUs. For our analyses we use publicly available data sources from internet (web sites of municipalities, Štatistický úrad SR, Bratislava 2014, (3)) primarily describing financial activities of the observed municipalities for accounting year 2013 such as closing account, financial statement and common statistical data as a number of population and total area/land of the municipality. Regarding to unsufficient data format, text data type of numeric data, data set for our analysis consists of 24 local self-governments, towns of Banská Bystrica region3 (see detail in Table 2, municipalities ordered by population size).

1 Act no 369/1900 Coll. on Municipalities, 583/2004 Coll. on Budget Rules of the Territorial Self-government
2 For more details see Appendix.
3 Banská Bystrica region consists of 540 settlements, of which 24 are towns and 516 villages.
Table 2. Observed Municipalities

<table>
<thead>
<tr>
<th>S. n.</th>
<th>Settlement Name</th>
<th>Shortened Name</th>
<th>Area</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Banská Bystrica</td>
<td>BB</td>
<td>103 376 386</td>
<td>79 583</td>
</tr>
<tr>
<td>2</td>
<td>Zvolen</td>
<td>ZV</td>
<td>98 727 415</td>
<td>43 148</td>
</tr>
<tr>
<td>3</td>
<td>Lučenec</td>
<td>LC</td>
<td>47 789 809</td>
<td>28 413</td>
</tr>
<tr>
<td>4</td>
<td>Rimavská Sobota</td>
<td>RS</td>
<td>77 550 171</td>
<td>24 454</td>
</tr>
<tr>
<td>5</td>
<td>Brezno</td>
<td>BRE</td>
<td>121 956 165</td>
<td>21 703</td>
</tr>
<tr>
<td>6</td>
<td>Žiar nad Hronom</td>
<td>ŽH</td>
<td>39 088 215</td>
<td>19 789</td>
</tr>
<tr>
<td>7</td>
<td>Detva</td>
<td>DET</td>
<td>68 088 032</td>
<td>15 047</td>
</tr>
<tr>
<td>8</td>
<td>Revúca</td>
<td>REV</td>
<td>38 867 109</td>
<td>12 766</td>
</tr>
<tr>
<td>9</td>
<td>Veľký Krtiš</td>
<td>VK</td>
<td>15 030 521</td>
<td>12 756</td>
</tr>
<tr>
<td>10</td>
<td>Fiľakovo</td>
<td>FIL</td>
<td>16 176 914</td>
<td>10 799</td>
</tr>
<tr>
<td>11</td>
<td>Banská Štiavnica</td>
<td>BS</td>
<td>46 734 435</td>
<td>10 330</td>
</tr>
<tr>
<td>12</td>
<td>Hriňová</td>
<td>HRI</td>
<td>126 489 032</td>
<td>7 793</td>
</tr>
<tr>
<td>13</td>
<td>Krupina</td>
<td>KRU</td>
<td>88 669 762</td>
<td>7 712</td>
</tr>
<tr>
<td>14</td>
<td>Hnúšťa</td>
<td>HNU</td>
<td>68 048 923</td>
<td>7 701</td>
</tr>
<tr>
<td>15</td>
<td>Nová Baňa</td>
<td>NB</td>
<td>61 256 213</td>
<td>7 542</td>
</tr>
<tr>
<td>16</td>
<td>Tornaľa</td>
<td>TOR</td>
<td>57 764 891</td>
<td>7 450</td>
</tr>
<tr>
<td>17</td>
<td>Žarnovica</td>
<td>ŽAR</td>
<td>30 398 950</td>
<td>6 451</td>
</tr>
<tr>
<td>18</td>
<td>Poltár</td>
<td>POL</td>
<td>30 529 151</td>
<td>5 811</td>
</tr>
<tr>
<td>19</td>
<td>Kremnica</td>
<td>KRE</td>
<td>43 134 034</td>
<td>5 542</td>
</tr>
<tr>
<td>20</td>
<td>Sliac</td>
<td>SLIA</td>
<td>39 830 301</td>
<td>5 056</td>
</tr>
<tr>
<td>21</td>
<td>Tisovec</td>
<td>TIS</td>
<td>123 426 204</td>
<td>4 270</td>
</tr>
<tr>
<td>22</td>
<td>Jeľšava</td>
<td>JEL</td>
<td>46 799 702</td>
<td>3 224</td>
</tr>
<tr>
<td>23</td>
<td>Modrý Kameň</td>
<td>MK</td>
<td>19 643 852</td>
<td>1 568</td>
</tr>
<tr>
<td>24</td>
<td>Dudince</td>
<td>DUD</td>
<td>6 849 746</td>
<td>1 453</td>
</tr>
</tbody>
</table>

Source: author

Input and output variables and sources for individual partial analyses are presented in Table 3.
Table 3. Input and output variables for analyses

<table>
<thead>
<tr>
<th>Analysis</th>
<th>Variable</th>
<th>Note</th>
<th>Data source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Property Management</td>
<td>(I) Municipal Lands</td>
<td>Lands administered by the municipality</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>(I) Municipal Buildings</td>
<td>Buildings administered by municipality</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>(O) Business and Property Ownership Income</td>
<td>Income from rent of buildings, non-residential premises, lands, billboards, market places, dividends from shared organizations</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>(O) Capital revenues</td>
<td>Income from the sale of capital assets (land, buildings, apartments)</td>
<td>6</td>
</tr>
<tr>
<td>Collection and administration of taxes and fees</td>
<td>(I) Population</td>
<td>Number of inhabitants</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>(O) Tax Revenues without Shared taxes</td>
<td>Collection of local taxes (real estate, dogs, public space usage, tourist accommodation, vending and slot machine</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>(O) Shared Tax</td>
<td>Central tax sharing individual income tax</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>(O) Nontax revenues</td>
<td>Income from the property ownership and business, from financial operations and loans, services and administrative charges, capital revenues</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>(O) Grant and Transfer revenues</td>
<td>Grants and transfers from the state budget and funds, other body of the public administration, EU budget, projects</td>
<td>5</td>
</tr>
<tr>
<td>Efficient size of the municipal staff</td>
<td>(I) Wage costs</td>
<td>Wage costs for municipal office staff</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>(O) Total revenues</td>
<td>Current revenues, Capital revenues, Income from financial operations</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>(O) Population</td>
<td>Number of inhabitants</td>
<td>1</td>
</tr>
</tbody>
</table>

Source: author

4. RESULTS

In this section, we study and present relative efficiency of chosen Slovak municipalities from three points of view: performance in property management, collection and administration of taxes and fees and analysis of efficient size of the municipal staff in relation to the size of municipality.

4.1. Property Management Analysis

The municipal property is an important factor of the municipal management, which can be used for multiple purposes that can reasonably overlap: primarily for the performance of self-government and also for the public purposes and business activities. According the law, the municipal authorities are required to manage municipal property in favor of the development of the village, its citizens, moreover they are required to cultivate, preserve and enhance it. It is true that production of the public sector is not sold and the making of profit is a secondary matter of the municipality, however, it is important too, because it is the source of the revenues to the municipal budget.

For this analysis we apply BCC-O oriented model for two inputs: municipal lands and municipal buildings and two outputs: business and property ownership income and capital revenues. All variables are given in a price (as a currency data type). As we can see in the Figure 1 ten municipalities occur to be efficient. Average efficiency score is 0,612, with the standard deviation 0,359. Minimal score 0,157 (15,7 %) was reached by the municipality of Filakovo.

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4 (I) at the beginning of the variable name indicates input variables, (O) output variables
5 All variables except population are given in currency data type „€“
6 Act no 138/1991 Coll. on Municipal Property, §7
We can give several recommendations for inefficient DMUs. Probably, it shouldn’t be increasing of its capital revenues, since the property of municipality is not infinite and we are not able to realize a profitable sale every year.

To compare, Figure 2 presents results of this analysis with excluded indicator of Capital revenues, but the relative efficiency of observed DMUs is not better, even in that alternative only six DMUs exhibit efficiency score equal to 1 and more than half of observed municipalities are extremely inefficient compared to the leaders. They reached efficiency score less than 0,31 (they are efficient only to 30%).

Figure 3 and Figure 4 bellow presents input and output data of this analysis in graphical point of view, a structure of the considered municipal property and a contribution of the gained finance from the rent and sale of the municipal property. Data in both figures are arranged in descending order by the reached efficiency score, vertical line indicates the “frontier” between efficient and inefficient DMUs. We admit that this model could be more perfect, if we had considered maintenance costs as other input indicator, however, we were not able to obtain it from publicly available data sources.
4.2. Collection and Administration of Taxes and Fees Analysis

The revenues to the municipal budget are very important factor of functioning of the municipality. They are means of realization of social-economic development of the municipality and full-value operation of municipal authority. In this partial analysis, we analyze the efficiency of the collection finance, which are imposed by the municipality (local taxes and fees) or they are gained regarding to the good municipal management (projects, grants and gifts).

For this analysis, we apply BCC-O oriented model for one input - population, which characterized the size of the municipality and three outputs: Tax Revenues without shared taxes, Nontax revenues and Grants and transfers. The first two output indicators represent the own municipal revenues. The indicator Grants and transfers consists from allocated money from the state budget for covering delegated state functions but also from the irregular finance gained from the grants and various projects (EU), what is the main reason why we include this indicator to this analysis. The shared taxes which are guaranteed by the respective law and create part of revenues, are excluded from this analysis, since its amount is beyond competence of municipality.

As shown in Figure 5 eight municipalities occur to be efficient. Average efficiency score is 0,763, the standard deviation is 0,19. The smallest score 0,444 (44,4 %) was reached by Hrniňová.

The Figure 6 presents normalized output data of this analysis arranged in descending order by the reached efficiency score. Two last municipalities (Hrniňová and Tisovec) show relatively low Nontax revenues (see detail in respective figure).
4.3. Analysis of the Efficient Size of the Municipal Staff in Relation to the Size of Municipality.

In this section we analyse the size of municipal office in comparing to the number of citizens of the municipality. The municipal council decides about the structure and number of the municipal staff, also about the number of its departments and their competencies. We suppose, they are proposed with respect to the number of citizens and total planned revenues. We substitute the number of employees of the municipal office by the wage costs, because this value is missing in the case of some observed municipalities.

In the analysis, we apply BCC-I oriented model centred on the proportional reduction of all inputs, in this case Wage costs. As the outputs we take Population which characterizes the size of the municipality and Total revenues which are, particularly, financial source for covering administration and wage costs. Figure 7 shows the result of the analysis.
Figure 7. Efficiency score of the efficient size of municipal staff

The municipalities are ordered from bottom to top by efficiency scores. Five municipalities appear efficient and up to eleven municipalities exhibit relative efficiency 50% and less. An average efficiency is 0.646, standard deviation 0.228. The minimal score 0.361 was reached in the case of Kremnica and Revúca municipalities. Recommendation for inefficient DMUs is partially reduce their wage costs below 13% of the total revenues of the municipality and of course increase the total revenues, for example with improving business activities of the municipality (rent of municipal buildings, lands and etc.).

5. CONCLUSION

The performance of a municipal management and administration is usually assessed individually, either by controlling and auditing authorities or by municipal councils and citizens. But availability of data on municipality performance to the public brings a possibility to compare the municipalities among themselves.

We studied the performance of local governments in 24 municipalities located in the same administrative region of Slovakia. We applied DEA to evaluate the relative efficiency of the municipal governments from three perspectives, taking relevant combinations of inputs and outputs into account.

First, we assessed the efficiency in getting income and capital revenues with respect to the area of land and the value of buildings administered by the municipality. Second, we evaluated the efficiency in gaining tax, nontax, grant and transfer revenues with regard to the municipality population. Third, we asked whether the size of the municipal office staff measured with their wage costs is efficient comparing to the population and the total revenues of the municipality.

In each partial analysis we calculated efficiency scores for all municipalities in order to rank them and distinguish the efficient from the inefficient ones. The ranking as well as some individual recommendations for inefficient municipalities resulting from these multidimensional analyses may be useful for local policy makers and for the citizens.

Acknowledgements

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Appendix: the DEA methodology

The input-oriented BCC (BCC-I) model evaluates the efficiency of DMU₀ (o = 1, 2, …, n) by solving the following linear program:

\[
\begin{align*}
\min_{\theta_o} & \theta_o \theta \\
\text{subject to} & \theta_o x_o - \lambda X \geq 0 \\
& Y \lambda \geq y_o \\
& e \lambda = 1 \\
& \lambda \geq 0 \lambda \geq 0,
\end{align*}
\]

where \( \theta_o \) is a scalar efficiency score of DMU₀, \( x_o \) is a vector of \( m \) inputs of DMU₀, \( y_o \) is a vector of \( s \) outputs of DMU₀, \( X = (x_1, ..., x_n) \) and \( Y = (y_1, ..., y_n) \) are the matrices of inputs and outputs of all DMUs, \( e \) is a row vector with all elements equal to 1, and \( \lambda = (\lambda_1, ..., \lambda_n) \) is a nonnegative vector of variables.

The optimal solution \( \theta_o^* \), \( 0 < \theta_o^* \leq 1 \), defines the recommended proportional reduction of all inputs.

The output-oriented BCC (BCC-O) model evaluates the efficiency of DMU₀ using the linear program:

\[
\begin{align*}
\max_{\eta_o} & \eta_o \eta \\
\text{subject to} & X \lambda \leq x_o \\
& \eta_o y_o - \lambda Y \leq 0 \\
& e \lambda = 1 \\
& \lambda \geq 0 \lambda \geq 0,
\end{align*}
\]

where the optimal solution \( \eta_o^* \), \( \eta_\lambda^* \geq 1 \), determines the recommended proportional increase of all outputs. In this case, the efficiency score of DMU₀ is defined by \( \theta_o^* = 1/\eta_o^* \eta_\lambda^* = 1/\eta_o^* \).

In the second phase of both BCC models possible non-proportional reduction of inputs and non-proportional increase of outputs (so called slacks) are evaluated. A DMU is efficient if and only if its efficiency score is equal to 1 and all slacks equal zero, i. e. neither proportional nor non-proportional change of inputs or outputs was discovered. Detailed explanation may be found in Luptáčik, 2010 and Cooper W. W., et al., 2007.

LITERATURE


INTERNET SOURCES:

2. Closing accounts of analyzed municipalities at individual municipal websites, (July - September, 2014)

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THE RELATIONSHIP BETWEEN ONLINE OPINION SEEKING AND CUSTOMER SATISFACTION WITH ONLINE STORES IN HUNGARY

ÁKOS NAGY
ILDIKÓ KEMÉNY
KRISZTIÁN SZŰCS
JUDIT SIMON

ABSTRACT
Since the early 1950s enormous amount of research has been dedicated to address the phenomenon of word-of-mouth. Initially based upon the direction and underlying motives, three major behaviour types can be differentiated (Flynn et al. 1996, Sun et al. 2006): opinion seeking, opining giving and opinion passing. This work analyses customers’ information seeking behaviour for others opinion on the internet in the typical stages of a purchase decision. The main aim of our research is to analyse the relationship between online opinion seeking, customer satisfaction with online stores and online opinion giving – especially the impact of online opinion seeking on the two other constructs – in Hungary, based on a representative sample of 1000 respondents. Valence of information is regarded as one of the major factors affecting opinion adoption, but it seems that a strong positive correlation exist between paying attention to positive and negative online word-of-mouth. Due to this result advanced opinion seeking behaviour could enable to reach higher level of customer satisfaction with online stores. According to multivariate statistical tests (in SPSS) and our model, we can conclude that online opinion seeking behaviour has a significant positive impact on customer satisfaction with online stores, as well as on opinion giving and opinion passing on the internet. This implies that opinion seekers are in fact mostly opinion leaders who not just share, but collect enormous amount of information about products and services and raise their expectations according to others’ feedback. By doing so their prior expectations are in relation to the true customer value of online stores and products. This means that customer satisfaction measured following the disconfirmation paradigm will reach a higher level and it is advisory for online retailers in Hungary to encourage customers to give feedback, because it will affect the customer satisfaction level in a positive manner.

KEY WORDS: online word-of-mouth, customer satisfaction, opinion seeking.

1. INTRODUCTION
The world became a ‘digital world’ around the middle of the 90’s (Szabó – Hámori 2006, 66) which significant development defines the transformation of the economy and new centres of gravity are shaping our daily life. Currently, information conveyed on the Internet enables to support the pre-purchase decision or even the entire purchase process. According to results of a EUROSTAT survey in EU-27 countries, almost 44% have purchased goods or services online during the previous year of 2012, which means a 4% increase compared to 2010. In Hungary, 25% of the total population has bought something on the Internet in the last year (EUROSTAT 2013). Furthermore, the percentage of those, who have already purchased online, is increasing from year to year. The indicator has risen from 74% to 76% in 2012 in the age group of 18-49. Additionally the proportion of online shoppers, who buy at least once in a month online, has seen an increase from 25% to 28% (GFK 2014).

Due to the accumulative importance of online purchasers one of today’s most important research fields is online customer satisfaction. Enormous amount of studies highlighted the fact that the retention of customers means lower costs comparing to acquisition of new ones, therefore increasing satisfaction level of current customers contributes to the profit margin and serves as a key to success in the long term (Carlson – O’Cass 2011; Christodoulides – Michaelidou 2011; Teimouri et al. 2012). In this context word-of-mouth (WOM) communication addresses an important arising question: how does information from others contribute to the satisfaction level with products and services? The significance of WOM for corporate marketing activities has long been recognized and it became more noticeable in recent years. According to the results of a questionnaire survey of 10 000 consumers conducted in every three years by Nomura Research Institute (NRI) it can be concluded that the importance of word-of-mouth has been growing, consumers place greater trust in the evaluations of actual users of products and services, rather than the official information published by the company, although consumers have recently been facing difficulties in “choosing useful information” (Murakami – Natori 2013).

Based on the previous considerations our research addresses the main question: how do consumer opinions affect customer satisfaction during online purchase decisions, especially in the form of electronic word-of-mouth?
2. BRIEF LITERATURE REVIEW

During online or offline purchase processes different environmental factors affect decision making. E-commerce offers convenience in respect of time and place as well as in connection with delivery. However personal interactions, the possibility of trying out or having a look at the real physical characteristics of goods and services are lost. Therefore people, who like to touch, smell and feel products buy less on the Internet (Shayesteh et al. 1999). Online purchase is most of the time a lonely, planned process rather than a social event. Nevertheless information flows easier than ever before and consumer ties enable to share positive or negative opinions with each other globally (Venkatesh et al. 2003).

Online purchase tendency is shaped by many factors. Most important personal characteristics are attitude to technology, "network lifestyle", time spent online, internet usage experience, technological skills and optimism (Bellman et al. 1999; Modahl 2000; Novak et al. 2000; Parasuraman 2000; Wolfinbarger – Gilly 2002). In respect of demographics, online consumers are characterized by higher income, career orientation, convenience and time saving desire (Lohse – Bellman 2000; Parasuraman 2000; Wolfinbarger – Gilly 2002). Beside consumer habits the so called situational effects should not be ignored as well, namely product and service characteristics, consumer's mood, whether the purchase is goal-oriented, purposeful, planned or hedonic values play a more important role in the decision (Wolfinbarger – Gilly, 2002).

The purchase process of an extended decision making consists of five steps, which can be shorter according to the buying situation (e.g.: low price, low involvement goods) (Hofmeister-Töth, 2008). The first step is the stage of problem/need-recognition, where the wants and needs arise and it is affected by several situational factors, i.e. dissatisfaction with the existing product, variety seeking, inventory depletion, corporate marketing activities. In e-commerce this means basically the need for online purchase, which can be directed toward products or services equally. During the next phase, the individual information search begins when actively and / or passively, external and / or internal sources are used as relevant information. Word-of-mouth can be particularly important at this stage and can influence (strengthen or weaken) depending on its valence (positive or negative) corporate communication effectiveness. Online stores offer a wide variety of information (prices, delivery conditions, payment options, references, etc.) and comparison opportunities for visitors. Furthermore information gathered on forums, blogs, rating sites, etc. influence consumer decisions. Beside external, internal information like previous usage experiences or opinions, assessments during this stage are relevant as well. Depending on the individual willingness to collect information and the importance of the purchase decision the next stage evaluation of alternatives follows. Based upon personal considerations and external information the purchase decision is made, but the process does not end. Post-purchase behaviour is about the evaluation of the previous process, whether a right or wrong decision has been taken. According to several factors and the quality of the purchased goods and services the customer will be satisfied or dissatisfied with the whole procedure.

Many researchers agree that the evaluation of quality for online stores is not limited to the transaction itself, but includes the entire range of provided electronic services (Montoya – Weiss et al., 2000; Wolfinbarger – Gilly, 2002; Zeithaml et al., 2002; Wolfinbarger – Gilly, 2003; Minocha et al. 2005, Bauer et al., 2005). These include all interactive services, which are conveyed via information-communication technologies (Sousa – Voss 2006). Accordingly, quality assessment should take into account, beside in transaction events, the pre- and post-service aspects, such as information gathering process, transaction accomplishment, customer service, or even refunds and problem management.

Minocha et al. (2005, 5-6) describe the online shopping experience process with six steps:

1. Expectation setting: the customer draws upon a number of social, organisational and individual influences from which he will create a personal benchmark of service quality expectations influenced by his motivations, needs, benefits and costs of using e-commerce, recommendations, word-of-mouth, advertising, and so on. These influences play a vital role in his decision about which website to visit and whether or not to make a purchase on a certain website.

2. Pre-purchase interactions: the customer chooses a website, searches for a products or services and makes a decision about whether or not to make a purchase, which is based on the usability of the homepage and other webpages of this site, information provided about the product or service, the price, the credibility of the website, the delivery mechanisms and refunds policy, etc.

3. E-purchase interaction: the customer selects the product or service and completes the transaction; this usually involves entering personal details, billing and delivery information, and credit card details.

4. Post-purchase interactions: involves tracking the order and receiving the delivery of products / services, the customer may need to query an order, complain about the state of the delivery, or question his credit card handling, and he is likely to contact the organisation at touch points other than the website.

5. Product/service consumption: if the customer is also the consumer, he will consume the products / services.
6. Post-total customer experience (TCE) evaluation: the customer will review experiences of conducting business with the e-commerce environment. During this stage, the customer compares the overall experience with the benchmark of expectations set during the first stage, and assesses whether he has received value from his experience. Unpleasant or unsatisfactory experiences across any of these stages and / or during the consumption stage may render a negative TCE, despite the e-commerce website being usable.

Accordingly, the future behaviour of customers (satisfaction, repurchase, referral, loyalty, etc.) is influenced by factors before, during and after the buying procedure.

Satisfaction measurement methodologies can be divided into subjective and objective methods. Objective indicators such as market share, churn rate, repurchase rate, etc., and are calculated indirectly, while subjective methods are based on customer perceptions (Hofmeister-Tóth et al. 2002, Kenesei – Kolos, 2007). The disconfirmation paradigm has a centre role among customer satisfaction measurement techniques, where satisfaction or dissatisfaction is a result of the relationship between expectations and performance (Hofmeister-Tóth et al. 2002). If we accept that satisfaction is about the entire performance of a provider, than quality is the antecedent of satisfaction (Johnson – Fronell 1991). Therefore satisfaction can be measured based on the expected and observed value of quality dimensions. Expectations are built up during earlier usage, communication phases as well as during the shopping experience and serve as a measure for performance. The equality of expectations and performance means confirmation, while over performance results in positive and under performance in negative disconfirmation which lead to affective reactions such as satisfaction or dissatisfaction (Oliver 1980, Szynanski – Henard 2001). It can be concluded that many factors affect customer expectations which are a basis for comparison. Remarkable internal customer information is previous experiences and quality assessment as well as needs and wants. Among external information sources interpersonal conversations, word-of-mouth or corporate marketing activities can be highlighted (Hill 1986).

In our research we focus on electronic word-of-mouth (eWOM), which can be defined as "any positive or negative statement made by potential, actual, or former customers about a product or company, which is made available to a multitude of people and institutions via the Internet" (Hennig-Thurau et al. 2004). This definition is an extension of on Arndt’s (1967) original version of word-of-mouth definition: oral, person-to-person communication between a receiver and a communicator whom the receiver perceives as non-commercial, concerning a brand, product, or a service. The online form of word-of-mouth has been enabled by the internet capable devices and solutions. Opinions, reviews and referrals can be diffused at a higher level and speed on the Internet than ever before. Electronic word-of-mouth is different from its traditional form in many ways, which is resulted mainly due to computer mediated communication characteristics. Unlike traditional WOM, where sharing of information is between small groups of individuals in synchronous mode (Steffes - Burgee 2009), eWOM communications involve multi-way exchanges of information in asynchronous mode (Hung - Li 2007). Because information does not need to be exchanged at the same time, eWOM communications are more persistent and accessible. The text-based information is usually archived and can be made available for long period of time (Hennig-Thurau et al. 2004). Furthermore this allows measuring and observing electronic word-of-mouth. In traditional face-to-face communications information is presented in private talk, but online partners do not need to be there at the same time and so opinions are spread to unknown individuals and groups (Karakaya - Barnes 2010). Therefore, widened networked communications can facilitate information exchange among people of various backgrounds (Van Alstyne - Brynjolfsson 2005). Traditional WOM originates from a sender who is known to the receiver of the information, and so the credibility of the communicator and the message is recognized by the receiver. In the case of online WOM because most of the time no direct face-to-face communications appear, opinions and referrals are unsolicited and will only be evaluated if it attracts the attention of prospective adopters and they find them (Park - Kim 2008).

Extent amount of research has been dedicated since the 1950s to analyse the influence of interpersonal communication and personal influence on consumer decisions (Arndt 1967). Moreover it is confirmed that word-of-mouth has a significant impact on consumer expectations (Anderson - Salisbury 2003), pre-usage attitudes (Herr et al. 1991) and shapes post purchase product and service perceptions (Bone 1995). Some studies highlight that WOM is much more effective than print ads, personal selling or radio spots (Engel et al. 1969). However Van den Bulte and Lilien (2001) found that these studies overestimate its effectiveness.

According to Cheung and Thadani (2012) theoretical online word-of-mouth research can be divided into two realms: market-level analyses and individual-level analyses. In the case of market-level analyses conclusions are drawn up from market indicators such as sales volume, objective panel data (i.e. website traffic, the rate and the valence of consumer reviews) (Zhu – Zhang 2010). On the other hand individual-level analyses postulate eWOM as a process of personal influence, in which communications between a communicator (sender) and a receiver can influence consumer purchase decisions (Park – Kim 2008). In this respect, studies focus on the understanding of antecedents and consequences that determine WOM communications, along three research streams. The first stream concentrates on the reasons why consumers actively spread the word about their experiences regarding certain services or products.
major factors satisfaction or dissatisfaction (Bowman – Narayandas 2001), company commitment (Dick - Basu 1994), relationship duration (Wangenheim - Bayon 2004), product novelty (Bone 1992) can be entitled. The second stream aims at better understanding information-seeking behaviour, especially, the circumstances under consumers rely on WOM communications more than on other sources in the decision making process. Consumers are more likely to seek the opinions of others if they have no or little expertise in a product category (Furse et al. 1984), perceive a high risk in decision making (Bansal - Voyer 2000), involvement level is high (Beatty & Smith, 1987). Studies in the third stream examine why certain personal sources of information exert more influence than others. Important factors are source expertise (Bansal - Voyer 2000), tie strength and demographic similarity (Brown - Reingen 1987). Significant, but in the present research not addressed, issue is source expertise, which is a mixture of competence, authority and know-how. It has an impact on trust and parallel to argument quality has a positive effect on brand attitudes (Chu & Kamal 2008). Hence in certain fields accepted and sought out sources, reviews, tests, rating sites (e.g.: tripadvisor.com) or market mavens (Gladwell 2007) exist, whom opinion people accept easily and prefer to adopt their views.

When confronting unusual circumstances, unfamiliar issues and/or challenging decisions, individuals, in search of pertinent information, frequently turn to others within their social spheres who they think are better informed on the subject. These more knowledgeable people who are able to provide product specific information are called opinion leaders. Opinion leaders are persuasive due to their involvement, expertise and experience in a given product category (Myers – Robertson 1972). Another source of personal influence is market mavens (Myers – Robertson 1972). When confronting unusual circumstances, unfamiliar issues and/or challenging decisions, individuals, in search of pertinent information, frequently turn to others within their social spheres who they think are better informed on the subject. These more knowledgeable people who are able to provide product specific information are called opinion leaders. Opinion leaders are persuasive due to their involvement, expertise and experience in a given product category (Myers – Robertson 1972). Another source of personal influence is market mavens (Myers – Robertson 1972). Another source of personal influence is market mavens (Myers – Robertson 1972).

Cheung & Thadani (2012) offer an integrative model for the analysis of eWOM along the social communication framework. Beside characteristics of the communicator and the receiver they highlight the factors of stimuli and context. Regarding the stimulus in traditional WOM literature the valence of information received an enormous amount of attention and past research has shown that consumers pay more attention to negative information than positive information. They also tend to weight negative information more than positive information during evaluation and decision making (Herr et al. 1991). Similarly, Park and Lee (2009) showed that negative eWOM has a stronger influence on eWOM effect than positive eWOM. Following these considerations the valence of opinions and reviews can affect satisfaction level, because it shapes customers’ previous expectations and quality perceptions. As highlighted before – satisfaction is a result of the assessment of the total transaction process, including information search – therefore word-of-mouth plays a potential positive role in the development of satisfaction level, due to its information diffusion function.
3. RESEARCH MODEL AND CORE ASSUMPTIONS

In our present research we are examining online word-of-mouth tendencies and especially the relationship between opinion seeking, opinion giving, opinion passing behaviour and customer satisfaction with online stores. We follow a general approach in the assessment of online word-of-mouth and do not restrict it to any kind of platform or major type. Our main aim is the identification of the relationship between the previously mentioned constructs, hence major sources (test/review sites, or experts) of information are not highlighted – the focus is on computer mediated communication between peers in the network.

Based on the previous literature review and considerations we draw up the following model (Figure 1) and hypotheses:

H1: Online opinion seeking behaviour has a positive effect on opinion adoption.

As Cheung et al. (2009) state considerable research has already demonstrated the relationship between information credibility and adoption. McKnight and Kacmar (2006) demonstrated the positive effect of the receiver’s perceived information credibility on the willingness to accept the information of a website. We can assume that if a person is seeking out information on the Internet with more effort the amount and so the adoption of information (opinions, recommendations, reviews, etc.) will reach a higher level.

H2: Opinion adoption has a positive effect on customer satisfaction.

We can conclude that the gathered opinions about a certain product or service/web-store contain useful information, because of adaption. It is as well obvious that these information shape customers’ expectations and help to evaluate whether to take the next step of the decision making process or not. Based on the disconfirmation paradigm customer satisfaction or dissatisfaction is a result of the relationship between expectations and performance (Hofmeister-Tóth et al. 2002). Hence if the gathered information helps to evoke customer expectations close to the real performance and avoid mistaken decisions it results in greater satisfaction.

H3: Online opinion seeking has a positive effect on online opinion giving.

H4: Online opinion seeking has a positive effect on online opinion passing.

H5: Online opinion giving has a positive effect on online opinion passing.

As stated before, opinion leaders cannot exist without opinion seekers, and vice versa as well as with the advent of the Internet opinion passing is an important part of the process. Information seekers are not necessarily opinion leaders, but many opinion leaders may also be opinion seekers because they desire more knowledge or expertise and the Internet provides several ways to disseminate information and enables advanced information search as well (Sun et al. 2006). Due to the enormous information demand and possibility it is assumed that among the different aspects of the online opinion leadership construct a positive relation exist.

H6: Online opinion giving has a positive effect on customer satisfaction.

H7: Online opinion passing has a positive effect on customer satisfaction.

If hypothesis 4 and 5 are supported, than we can assume that online opinion giving and passing behaviour is positively related to customer satisfaction. Information collected and spread through the Internet can help others in selecting the ideal alternatives of products and services as well as those who have already personal experiences from usage or transactions and want to share their opinions will have a greater satisfaction level. It could be argued that if negative experiences occur, customers are willing to share it with others or pass along information to those who they think might be interested in the same products and services. Hence customer satisfaction is not necessarily in positive relation especially to the opinion passing behaviour of customers.
Figure 1. The proposed initial model

Drawing from the measures of online word-of-mouth used in previous studies (Flynn et al. 1996, Sun et al. 2006), the engagement in eWOM was operationalised with three specific behaviours: opinion seeking, opinion giving and opinion passing. Specifically, Flynn et al.'s (1996) opinion seeking and opinion leadership scales were adopted to the online environment and to the research design. Opinion-passing behaviour was measured by adopting Sun et al.'s (2006) online forwarding scale. The number of items was reduced in order to meet the expectations of online questionnaires. Online satisfaction was measured using Chang et al. (2009) scale and opinion adoption was operationalised based on the review/recommendation adaption scale used by Cheung et al. (2009). The items used in the questionnaire are listed in Table 1.

Table 1. Research scales

<table>
<thead>
<tr>
<th>Factors</th>
<th>Indicators</th>
</tr>
</thead>
</table>
| **eWOM review / recommendation adoption:** (Cheung et al. 2009) (1-7 Likert scale) (OPADOPT) | 1. I agree with the online review/recommendation.  
2. Information from the online review/recommendation contributed to my knowledge of discussed product/service.  
3. The online review/recommendation made it easier for me to make purchase decision. (e.g., purchase or not purchase).  
4. The online review/recommendation has enhanced my effectiveness in making purchase decision.  
5. The online review/recommendation motivated me to make purchase action. |
| **Customer satisfaction:** Chang et al. 2009 (1-7 Likert scale) (SAT) | 1. I am satisfied with my decision to purchase from this Web site.  
2. If I had to purchase again, I would feel differently about buying from this website.  
3. My choice to purchase from this website was a wise one. |
| **Online opinion seeking:** based on Flynn et al. (1996) adapted by Sun et al. (2006) and Chu & Kim (2011) (1-7 Likert scale) (OPSEEK) | 1. When I consider new products, I ask others on the internet for advice.  
2. I like to get others opinions on the internet before I buy new products.  
3. I feel more comfortable choosing products when I have gotten my others’ opinions on them. |
| **Online opinion giving:** based on Flynn et al. (1996) adapted by Sun et al. (2006) and Chu & Kim (2011) (1-7 Likert scale) (OPGIV) | 1. I often persuade others on the internet to buy products that I like.  
2. My contacts on the internet pick their products based on what I have told them.  
3. On the internet, I often influence others’ opinions about products. |
| **Online opinion passing:** Based on Flynn et al. (1996) adapted by Sun et al. (2006) and Chu & Kim (2011) (1-7 Likert scale) (OPPASS) | 1. When I receive product related information or opinion from a friend, I will pass it along to others on the internet.  
2. On the internet, I like to pass along interesting information about products from one group of my contacts to another.  
3. I tend to pass along others’ positive reviews of products to other contacts on the internet. |

Source: own compilation
4. RESEARCH RESULTS

In order to verify the proposed model and to draw up electronic word-of-mouth tendencies we conducted an online survey in Hungary. Respondents were selected out of an online panel and those were only accepted who have purchased a product or service online in the past three months. The sample is representative of the Hungarian population with respect to gender, age and type of settlement. Descriptive statistics of the responses to the questions in the instrument are in Table 2.

In model development and assessment, confirmatory factor analysis (CFA) and structural equation modelling (SEM) were used.

Table 2. Demographic results

<table>
<thead>
<tr>
<th>GENDER</th>
<th>N=1000 person</th>
<th>TYPE OF SETTLEMENT</th>
<th>N=1000 person</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>43,50%</td>
<td>Capital</td>
<td>30,60%</td>
</tr>
<tr>
<td>Female</td>
<td>56,50%</td>
<td>County seat</td>
<td>23,70%</td>
</tr>
<tr>
<td>AGE GROUP</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-29</td>
<td>9,40%</td>
<td>Village</td>
<td>31,60%</td>
</tr>
<tr>
<td>30-39</td>
<td>26,40%</td>
<td>Other</td>
<td>0,40%</td>
</tr>
<tr>
<td>40-49</td>
<td>20,10%</td>
<td>FAMILY STATUS</td>
<td></td>
</tr>
<tr>
<td>50-59</td>
<td>19,90%</td>
<td>Single</td>
<td>13,40%</td>
</tr>
<tr>
<td>59+</td>
<td>23,70%</td>
<td>In a relationship</td>
<td>21,80%</td>
</tr>
<tr>
<td>AVERAGE AGE</td>
<td>46,83 year</td>
<td>Married</td>
<td>45,10%</td>
</tr>
<tr>
<td>EDUCATION</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary school</td>
<td>0,60%</td>
<td>Widow</td>
<td>3,60%</td>
</tr>
<tr>
<td>Secondary school</td>
<td>6,40%</td>
<td>In a civil partnership</td>
<td>7,30%</td>
</tr>
<tr>
<td>High School</td>
<td>36,30%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collage</td>
<td>28,70%</td>
<td>I live with my parents</td>
<td>9,70%</td>
</tr>
<tr>
<td>University</td>
<td>26,70%</td>
<td>I live with my parents and grandparents</td>
<td>1,10%</td>
</tr>
<tr>
<td>NET MONTHLY INCOME</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Our monthly income is not enough to buy the basic goods.</td>
<td>5,30%</td>
<td>I live alone</td>
<td>14,00%</td>
</tr>
<tr>
<td>We could buy the basic goods, but we cannot buy any extras.</td>
<td>26,90%</td>
<td>I live with my partner without a child</td>
<td>30,90%</td>
</tr>
<tr>
<td>We could buy the basic goods, and we can buy some extras.</td>
<td>54,40%</td>
<td>I live with my partner with a child</td>
<td>33,70%</td>
</tr>
<tr>
<td>We can buy everything easily what we need.</td>
<td>13,40%</td>
<td>I live without a partner but with a child</td>
<td>6,70%</td>
</tr>
<tr>
<td>AVERAGE NET INCOME</td>
<td>120 654 Ft</td>
<td>Other</td>
<td>2,50%</td>
</tr>
</tbody>
</table>

Source: own compilation

According to our results 36,7% of the respondents is looking for information in the first stage of the online purchase process, when wants and needs arise. In the initial information search period the level drops a bit by 0,7% to 36%, but it rises again up to 38,3% when customers have to compare alternatives. Post purchase evaluations appear only at 8,1% of the respondents and 14,1% marked that he or she is not looking for information from others during the purchase decision process. Reviews, recommendations from others stem from different sources. More than 40% of the respondents marked that they get opinions on the own website of the brand / company or web shop, however the most influential information stems from review sites (mean: 5,59) (Table 3).
Table 3. Major sources of information and their influence on decision making

<table>
<thead>
<tr>
<th>Do you get online reviews, recommendations on ....? Please rate the extent (from 1 to 7) to which the indicated source(s) influence your buying decision!</th>
<th>Yes (%)</th>
<th>Mean</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. blogs</td>
<td>25,7</td>
<td>4,75</td>
<td>1,29</td>
</tr>
<tr>
<td>2. social media</td>
<td>34,6</td>
<td>4,59</td>
<td>1,40</td>
</tr>
<tr>
<td>3. the brand or company website of the given product/service</td>
<td>42,6</td>
<td>5,12</td>
<td>1,36</td>
</tr>
<tr>
<td>4. the site of the web shop</td>
<td>43,9</td>
<td>5,05</td>
<td>1,28</td>
</tr>
<tr>
<td>5. review sites</td>
<td>38,5</td>
<td>5,59</td>
<td>1,19</td>
</tr>
<tr>
<td>6. e-mails, newsletters</td>
<td>33</td>
<td>4,70</td>
<td>1,39</td>
</tr>
<tr>
<td>7. news sites</td>
<td>24</td>
<td>4,95</td>
<td>1,31</td>
</tr>
<tr>
<td>8. instant messenger (pl.: msn, skype)</td>
<td>2,6</td>
<td>5,04</td>
<td>1,43</td>
</tr>
</tbody>
</table>

Source: own compilation

Concerning the valence of information, rated on a seven point scale, positive reviews’ attraction level was 5,57 (STD: 1,34) while negative reviews reached 5,46 (1,47) points. The correlation (Spearman’s rho (0,64) and Kendall’s tau (0,59) coefficient) between the attraction level of positive and negative information is strong and significant at the 0,01 level. Therefore we can conclude that positive and negative opinions are rated in total and they are not independent from each other regarding the attraction of interest. Almost 47% of the respondents indicated that they usually respond to a short evaluation questionnaire after their online purchase and 16,2% agree that they write own reviews and share thoughts with others about their experiences. Out of 10 opportunities they give reviews or recommendations online on an average 4,12 times (STD: 2,78) and 4,15 times offline (STD: 2,76).

Internal consistency of the used scales in the proposed model is acceptable: the Cronbach-alphas are higher than 0,7 (Nunnaly & Bernstein, 1994), and the composite reliability values (CR) are also higher than 0,7. The construct and discriminant validity of the scales are also sufficient, the AVE-s are higher than 0,5, and square roots of AVE-s are higher than the correlations between the constructs (Fornell & Larcker, 1981) (see Table 4). For the analysis of the reliability of the items, we used confirmatory factor analysis. Based on our results we could conclude that the items describe the supposed constructs well: with one exception all of the items have a standardized regression weight higher than 0,7. If this item (OPSEEK1) were deleted, the goodness of fit of the model would not increase, thus we can keep this item in our model (see Table 4).

Table 4. Reliability and correlations for the construct

<table>
<thead>
<tr>
<th>Construct</th>
<th>Item</th>
<th>Std. regr. weight (&gt;0,7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opinion seeking</td>
<td>OPSEEK1</td>
<td>0,687</td>
</tr>
<tr>
<td></td>
<td>OPSEEK2</td>
<td>0,823</td>
</tr>
<tr>
<td></td>
<td>OPSEEK3</td>
<td>0,952</td>
</tr>
<tr>
<td></td>
<td>OPSEEK4</td>
<td>0,924</td>
</tr>
<tr>
<td>Opinion adoption</td>
<td>OPADOPT1</td>
<td>0,718</td>
</tr>
<tr>
<td></td>
<td>OPADOPT2</td>
<td>0,757</td>
</tr>
<tr>
<td></td>
<td>OPADOPT3</td>
<td>0,876</td>
</tr>
<tr>
<td></td>
<td>OPADOPT4</td>
<td>0,835</td>
</tr>
<tr>
<td></td>
<td>OPADOPT5</td>
<td>0,818</td>
</tr>
</tbody>
</table>
The fit indexes of the assumed model were very good: root mean square of approximation (RMSEA) = 0.06; Trucker-Lewis index (TLI) = 0.96; comparative fit index (CFI) = 0.97; normed fit index (NFI) = 0.97 (see Table 5).

Table 5. Goodness of Model Fit Indices

<table>
<thead>
<tr>
<th>Index</th>
<th>Value</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>RMSEA</td>
<td>≤0.06 (Hu and Bentler, 1999); ≤0.07 if CFI ≥0.92 (Hair et al., 2010)</td>
<td>0.06</td>
</tr>
<tr>
<td>CMIN/d.f.</td>
<td>&lt; 5 (Marsh &amp; Hocevar, 1985; Carmines &amp; McIver, 1981); ≤3 (Bentler, 1990)</td>
<td>4.02</td>
</tr>
<tr>
<td>NFI</td>
<td>≥0.90 (Hair et al., 1992)</td>
<td>0.97</td>
</tr>
<tr>
<td>TLI</td>
<td>≥0.90 (Homburg and Baumgartner, 1996)</td>
<td>0.96</td>
</tr>
<tr>
<td>CFI</td>
<td>≥0.90 (Homburg and Baumgartner, 1996)</td>
<td>0.97</td>
</tr>
</tbody>
</table>

The explained variance of the used constructs are acceptable ($R^2_{OPPASS}=0.741$, $R^2_{OPADOPT}=0.376$, $R^2_{OPGIV}=0.189$, $R^2_{SAT}=0.101$). The reason, because satisfaction has the lowest explained variance could be, that the typical antecedents of satisfaction – as perceived quality or perceived value – were not used in this model, and we focused only on some personal characteristics, consumer attitudes (Figure 2).

Figure 2. The model results (path coefficients)

Our main findings are presented in Table 6. The hypotheses dealing with links between constructs connected to the major behaviour types of WOM were supported. Only one hypothesis dealing with the satisfaction as an output was supported. Based on our results opinion adopting behaviour has a positive significant effect on satisfaction. Opinion giving has also a significant effect on satisfaction, but is it not positive as we assumed. Opinion passing has no significant effect on satisfaction.
Table 6. Summary of the results

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Standardized Regression Weights</th>
<th>t-value</th>
<th>Hypothesis supported</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1 (+) OPSEEK --&gt; OPADOPT</td>
<td>0.613</td>
<td>***</td>
<td>Yes</td>
</tr>
<tr>
<td>H2 (+) OPADOPT -- SAT</td>
<td>0.317</td>
<td>***</td>
<td>Yes</td>
</tr>
<tr>
<td>H3 (+) OPSEEK --&gt; OPGIV</td>
<td>0.435</td>
<td>***</td>
<td>Yes</td>
</tr>
<tr>
<td>H4 (+) OPSEEK --&gt; OPPASS</td>
<td>0.054</td>
<td>0.026</td>
<td>Yes</td>
</tr>
<tr>
<td>H5 (+) OPGIV --&gt; OPPASS</td>
<td>0.836</td>
<td>***</td>
<td>Yes</td>
</tr>
<tr>
<td>H6 (+) OPGIV --&gt; SAT</td>
<td>-0.22</td>
<td>0.006</td>
<td>No</td>
</tr>
<tr>
<td>H7 (+) OPPASS --&gt; SAT</td>
<td>0.087</td>
<td>0.268</td>
<td>No</td>
</tr>
</tbody>
</table>

Source: own compilation

4. CONCLUSIONS

Enormous amount of research has been dedicated to the issue of assessing customers’ satisfaction level. It has been widely recognized that satisfaction is among the major factors which affect customers’ future behaviour. It has a tenacious relationship with quality and according to the theory it is shaped by prior expectations. These are dependent on various personal and situational factors. Among them this study focused on a certain issue: word-of-mouth. The relationship between customer satisfaction and WOM is regularly analysed in a way where the major question is about WOM intent. Precisely, what are the major factors which motivate a customer who has certain experiences with a product or company to share his or her opinion with others? In our research we are following a different aspect: how is customer satisfaction shaped by a customers’ certain behavioural characteristics which are linked to the different dimensions of opinion leadership? With the advent of the internet, information about products and services reaches a higher and higher level every day. Customers have the opportunity to seek and give opinions about their purchase and consumption experiences easier than ever before. Due to this it is an eligible question, whether someone who is highly involved in searching for information will be more satisfied or not? We could expect that someone who is trying to collect others opinion will be more satisfied with a given purchase decision because his or her expectations have been raised and directed by the available information. However it is as well a question whether those, who provide this information are sharing thoughts which can be used in a purchase decision or not? According to traditional word-of-mouth literature opinion leaders cannot exist without opinion seekers and vice versa. Those who are willing to share information with others have to bear in mind that their opinion will be only listened to if it is reliable and relevant. In order to meet these expectations we can await that they will be trying to seek information as well. As well as opinion giving would be irrelevant if no one would listen to it. On the other hand online word-of-mouth has a third dimension which is opinion passing, i.e. forwarding information to others who might have not received it yet. It is as well hypothesised that opinion passing is positively related to the other behavioural dimensions of opinion leadership. Following these considerations it can be assumed as well that those who are gathering and sharing information with others on the internet will be more satisfied with a certain purchase decision because their expectations will be raised according to the product or service value. In our model we have synthetized these questions and could approve many of the hypothesised relationships. It could be proven that the three different behavioural dimensions of online opinion leadership are related. A higher level of opinion seeking behaviour will result in higher opinion giving and even though the path coefficient is very low it will positively affect opinion passing as well. Opinion giving is positively related to opinion passing which means that those who are willing to give product recommendations and reviews are willing to share information stemming from other sources as well. They are not just taking an active role in the procedure but are motivated to pass along information as well. The major question about the relationship between opinion seeking, giving, sharing and customer satisfaction cannot be answered in a simple way. While we can conclude that opinion seeking behaviour has a positive effect on customer satisfaction mediated by opinion adoption; satisfaction is negatively related to opinion giving. One of the reasons behind this relationship could be that those who are involved in sharing their personal experiences are more critical than others. Their expectations could be guided by their personal attitude of continuously assessing the purchase period in order to find positive and negative matters. Opinion giving is effort consuming and an active behaviour, it needs time and issues which could be interesting to others. While opinion seekers adopt information and their expectations are shaped by the adopted opinions, opinion givers have to pay attention to every detail. Consequently their customer satisfaction level is not just a result of previously shaped expectations and the habituation of being ‘satisfied’, they put effort on assessing every purchase decision. An additional reason could be that opinion givers are involved in searching for information, comparing many opinions and might have a wider view about the different characteristics. Due to more assessment dimensions of a given product or service, their satisfaction level will be more varied. However in order to find exact reasons, further research should be initiated. Nevertheless we can conclude that opinion seeking
has a positive effect on the behavioural intention of giving and passing along product information and two of these behavioural dimensions of opinion leadership have a significant effect on prior expectations and customer satisfaction level. It is highly recommended for companies to make a platform for online word-of-mouth available on their website and encourage customers to share thoughts with each other about products and services in order to reach higher level of customer satisfaction.

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MINI MULTINATIONAL COMPANIES – THE NEW FORCE IN THE GLOBAL ECONOMY

DUŠKO PAVLOVIC

ABSTRACT

Digitalargecompanies,multinational companies of the industrially most developed economies have been the dominant force behind international economy since the 17th century. Their power became particularly prominent in the second half of the 20th century. Since the 1990-s these companies have started facing competitors in the global market – the largest companies from the developing economies, thus changing the list of the greatest global multinational companies as well as the list of countries they are based in. Nevertheless, up until the end of the 20th century, the prerequisite for the presence on the global corporate scene was the size of the company. Technological changes above all, the development of online business and lower costs of telecommunication and transport services in the last 20 years have also enabled medium and small sized companies to organise their business on the global scale. A new type of company also appeared – the mini multinational company. The paper analyses the conditions of setting up and developing a mini multinational company, its work principles and current position in international economy. The paper also points to the possibilities of medium and small sized companies in the Republic of Croatia to use the mini-multinational experiences in order to expand their corporate activities onto the international market.

KEY WORDS: multinational companies, mini multinational companies, foreign direct investment, international business.

1. INTRODUCTION

Multinational companies are most often defined as enterprises conducting business in at least two countries.

Even though some authors (Jones, 2000) consider English and Dutch East India Companies that conducted business in a larger number of Asian countries as the first multinational companies, these, however, were not multinational companies as we define them today. Namely, apart from business activities that were mostly defined by English and Dutch governments, they were in charge of a range of political and military tasks in the colonies that these countries held in Asia. It is also worth mentioning that both of these companies did not in reality do business internationally, because the Asian countries in which they were present formed part of the territory of the English and Dutch colonial empires. The income they earned by trading in colonial goods in which, by the home countries decree, they held monopolies, served partly to cover the costs of administrative and military staff. These employees maintained authority in India, Indonesia and other Asian countries alongside or instead of the administrative-military staff of the home countries. Both of these companies were a form of a corporate-political-military organisation, which differentiates them greatly from the multinational companies that have been developing since the beginning of the 19th century.

The multinational companies that have developed since the 19th century are no longer based on colonial acquisitions, but undertake business activities abroad with the purpose of spatial expansion of domestic business and permanent presence on the foreign markets. Also, the plants in foreign countries are integrated into the business system of the parent company, which is the fundamental characteristic of modern multinationals. According to these criteria the first multinational companies are Singer, the American manufacturer of sewing machines and the German company Siemens. In the 19th century these companies established the first manufacturing plants abroad, Siemens in 1858 in Great Britain and Singer in 1867, also in Great Britain. (Chandler, Mazlish,2006,pp 73-74).

From that time until the second half of the 20th century, numerous large enterprises from the USA, Western Europe and Japan achieved direct business presence in almost all countries of the world, many of them in several dozen, and some, such as Siemens, General Electric, DHL in almost all countries of the world. Siemens thus has 290 plants worldwide (www.siemens.com-28.7.2014.), and DHL (part of Deutsche Post) is doing business in 220 countries and territories, practically in all parts of the globe (www.dhl.com-28.7.2014.). Since the 1980-s, apart from American, Western European and Japanese companies, enterprises from the developing economies, especially China, India, South Korea, Russia and others have also joined the process of internationalisation, thus multinationals with headquarters in developing economies are gaining ground among the largest global companies. In 2000 among 50 largest multinational companies according to annual turnover, only two were based in a country outside the US-Western Europe-Japan triangle. In 2013 fourteen were based in a country outside of the three areas, especially in China. (www.fortune.global.500.com-29.7.2014.).
In the 19th and the most of 20th centuries the most frequent pattern according to which a national enterprise became an international, i.e. multinational company for most enterprises from the developed and developing economies was similar. Enterprises grew larger in a national framework, later expanding through export, licence sale, franchising and similar activities outside national borders, subsequently achieving direct presence abroad mostly through direct foreign investment.

However, in as early as 19th century some enterprises started exporting soon after they were established, later undertaking direct presence on the foreign market. This is how the American Ford company, founded in 1903, exported its sixth manufactured car. In its second year of business it founded a company in Canada. By 1914 it was the largest car manufacturer in Great Britain and by 1930 it had manufacturing plants in 18 countries (Chandler, Mazlish, 2006, pp 76-77). Notwithstanding, such a business endeavour was more of an exception at that time than a rule.

Foreign direct investment, as the main method of achieving direct presence on foreign markets has marked a rapid growth since the 1980-s (Graph 1), also sparking the growth in number, size and power of multinational companies.

**Graph 1. TRENDS IN GLOBAL FDI FLOWS 1999 – 2012, IN BN $ USD**

Thus in 1990-s there were 37,000 multinational companies (Ibidem, p. 2), and now there are around 82,000 (World Investment Report, 2010, p. 17). Among the 82,000 there are, generally considered 500, gigantic well-known companies present worldwide, while the rest is made up of medium-sized and small enterprises. In most papers dealing with multinationals the attention is paid to the 500 largest global multinational companies. This is understandable because their economic power, often greater than that of individual countries, has great influence on the international economic relations and economic growth and development of a large part of the world.

The group of small and medium-sized enterprises listed among the 82,000 multinational companies mostly do business in one to two neighbouring countries, besides their own, thus not having great economic power or significance in international economic relations. This is why they do not attract attention of the economic and/or political ear. However, since the 1980-s this has started to change.

## 2. BORN GLOBAL COMPANIES

The process of liberalisation of international trade with the reduction of tariffs as well as discontinuation of numerous non-tariff barriers, the drop in prices of transport and communication services (Graph 2) along with rapid technological advances all taking place in the last decades of the 20th century, created a new environment for the development and international expansion of business, for both large and medium and small enterprises. The competition has become more intense because domestic industries are no longer protected from foreign competitors due to tariffs, non-tariff barriers and high costs of transport and communication, thus companies are competing under the same conditions even in the most remote markets.
There is an emergence of a new type of company called “born global” not adhering to the traditional approach of growing on the domestic market then expanding its business abroad, but upon foundation focusing on the international market and at the same time expanding in their own country and abroad. This type of business often pays more attention to the foreign corporate activity than the one on the domestic market, especially the “born global” companies set up in small economies with limited domestic demand.

The “born global” term was coined in 1993 by McKinsey& Co when used for the description of rapid internationalisation of some companies in Australia. Today it is used to describe small and medium-sized enterprises that internationalise their business soon after they are set up. (Hill, Requejo, 2011, p. 221)

A good example of a “born global” company is the British History and Heraldry company, which in the first six years of existence expanded to sixty countries exporting 70% of its production. (Cavusgil, Knight, Riesenberger, 2008, p. 68).

In the Hidden Champions research the authors analysed 500 companies from Europe and America that found niches for their business growth and determined that one third of them started selling their products abroad in the first year of their existence. (Hill, Requejo, 2011  p. 221).

The technological advances, especially the development of the internet, faster and cheaper transport and communications have greatly eliminated the size handicaps for companies and economies. New circumstances have made possible that new companies from small economies such as Denmark, Belgium, Switzerland, Singapore, Israel and others equally compete on the international markets with companies from largest and most developed countries. Born global companies are not only founded in these small, open economies, but also in larger economies such as the USA. Apart from searching for a market niche, one of their common denominators is the utilisation of new technologies and management competences to achieve fast expansion on the international market, despite scant financial and other resources, which is almost always characteristic of newly founded companies.

3. THE CONCEPTUALISATION OF MINI MULTINATIONAL COMPANIES

A certain number of “born global” companies develop into large multinational companies, with the rest remaining at the small or medium size level, but with a large share in international business. These small and medium companies founded on the basis of the born global business strategy, together with small and medium enterprises developed on the principles of traditional business strategy of growth on the domestic, and later expanding to international markets, in which they achieve a significant part of their total turnover, are mini multinational companies.

According to the definition of the European Union, small and medium-sized companies employ less than 250 people, generate an annual turnover of less than 50 million Euros and annual balance sheet total less than 43 million Euros (www.ec.europa/enterprise/policies/sme/facts.-27.7.2014.). The same classification criteria are applied in Croatia (Small Business Development Promotion Act, Article 12). There is also another way of defining small and medium-sized enterprises, and in the USA the same rule does not apply to all companies, but different size criteria is determined by
different activities (Parboteeah, Cullen, 2011, pp. 177-178). In this paper the European Union definition is used for the analysis of small and medium-sized enterprises.

4. INTERNATIONALISATION STAGES OF SMALL AND MEDIUM-SIZED ENTERPRISES

Even though a part of the mini multinationals, as mentioned in the previous chapter, included the internationalisation of their business from its conception, most of small and medium companies developed international business activity in stages and over a longer time period. Most frequently they have spent first several years operating on the domestic market, acquiring business experiences and knowledge and securing financial, staff and other resources, then moving toward business activities abroad. The process of growing from a national to a multinational (transnational) company for small and medium-sized enterprises is most frequently conducted in six stages (Ibidem, pp. 178-9):

Stage 1: Passive export – enterprise meets export orders, but does not actively seek export business;

Stage 2: Export activities – managers actively seek export business. Considering the limited resources, they usually rely on foreign trade intermediation. At this stage export is perceived as a new business opportunity;

Stage 3: Export department – enterprise utilises significant resources to increase export operations. By doing this it usually relies on local distributors in target economies;

Stage 4: Foreign branch office – Increased demand in certain economies justifies the foundation of branch offices. This requires considerable resources and staff competent in working in a foreign environment;

Stage 5: Foreign production – a very demanding and risky stage for small and medium enterprises because failure can bring into question the survival of the entire enterprise;

Stage 6: Multinationalisation – small and medium-sized enterprises, as well as large ones, are also able to develop an integrated foreign business network, which is one of the fundamental characteristics of multinational companies.

From the point of view of employment, affects on GDP and share in export, small and medium-sized companies are highly significant for any economy. This is why in many economies they can count on various financial, advisory and human resources aid during the process of internationalisation and growth from a small or medium-sized company to a mini multinational company so they could easily advance through the stages.

5. THE SIGNIFICANCE OF MINI MULTINATIONAL COMPANIES FOR NATIONAL ECONOMIES

This is understandable considering that small and medium-sized enterprises in certain economies make up over 90% of all enterprises. In the European Union there are 23 million small and medium-sized enterprises, which is more than 98% of businesses. They have provided two thirds of the total private employment and around 80% of new jobs created over the past five years. (www.ec.europa.eu/enterprise-27.7.2014.) In countries like Italy, South Korea and China, small and medium-sized enterprises achieve over 50% of total export (Cavusgil, Knight, Riesenberger, 2008, p. 13). And these are countries pertaining to largest exporters in the world. Such share of small and medium-sized enterprises in export results from the fact that modern technologies have eliminated barriers to internationalisation that previously existed for small and medium enterprises. Today any company, regardless of size, can approach customers via the internet in every country in the world. Many small and medium-sized enterprises do so to such an extent that they have become true mini multinational companies.

The American company Lubricating Systems, which produces oils for machine lubrication employs only 25 people, and achieves sales of 6.5 million dollars, one third of which in exports. The German company G. W. Barth, manufacturer of cocoa roasting equipment, employs 75 people, and achieves 70% of global sales in this area (Hill, Requejo, 2011, p. 50). Such examples are plentiful as for companies from large, so for companies from small economies.

Even though technology has facilitated global presence of small and medium-sized companies, the competences of the management to find the market niches and high flexibility of small and medium enterprises in adjusting to changes in the corporate environment are much greater in large enterprises, so this represents a competitive edge for this group of corporate entities and facilitates their successful competition in the global market.

Not only are small and medium-sized companies with several dozen employees included in the international market, as evidenced by the Lubricating Systems and G. W. Barth, but these markets also consist of companies with 1 – 2 employees. By making business contacts over the internet with appropriate experts from various countries, these companies form
teams for the creation and development of a business project. In case they succeed they share the achieved profits and go on their separate ways in search of another team of experts for the launch of a different project. “The community exists for the project, not to support the company in which the project resides. That’s a quantum leap from the old, industrial-age model of production.” (Metller, Williams, p. 13, www.lisboncouncil.net/publications-3.8.2014.).

The importance of small and medium enterprises is especially high in recruitment. Most of recruitment is achieved by young and newly founded companies. Thus the total net increase in employment in the USA from 1995 to 2005 was achieved by companies up to five years of existence, with newly founded companies participating with 20% in the share of new job creation, even though they have a share of only 3% in the total number of all companies in the USA (Ibidem, pp. 2, 5).

The OECD research shows that for companies sharing similar characteristics in terms of country, size, industrial area and age, age is a more significant indicator for creation of new jobs, rather than size. In other words, creation of new jobs decreases with the age of the company (Ibidem, p. 5).

Due to the great significance of small and medium-sized enterprises for national economies, many governments are adopting measures for the promotion of new companies and support of their growth and development. In June 2008 the European Commission launched The Small Business Act (SBA) for Europe (www.ec.europa.eu/enterprises/policies-27.7.2014.), a set of measures designed to help small firms.

The Republic of Croatia, in which small and medium companies made up 99.6% of all businesses and participated with 51% in total annual turnover of all businesses in 2012 (CEPOR, p. 13), adopted the Small Business Development Promotion Act (Official Gazette 29/04,63/07,53/12,56/13) defining a range of measures to facilitate and promote the business of small and medium-sized enterprises.

The importance of small and medium companies for Croatian economy is also indicated by data related to employment. Namely, employment in small enterprises grew by 5.3%, while in large ones it fell by 4.8% from 2011 to 2012 (CEPOR, p. 13).

A number of Croatian small and medium enterprises achieve a considerable part of their annual turnover by exporting; some of them – Sestan-Busch, DOK-ing, Lipik Glas, Telegra – have already become true mini multinational companies, while others, such as Jadranski Galenski Laboratorij or HS Produkt outgrew the status of small and medium-sized enterprises exactly due to the process of internationalization. In a short period of time they moved from companies with a few dozen employees to companies with over 600 employees (Jadranski Galenski Laboratorij) or 1,000 employees (HS Produkt).

In 2012 small and medium-sized enterprises in the Republic of Croatia had 43.6% share in total exports. From 2011 to 2012 the total turnover of Croatian companies in exports grew by 1.04%. This growth was achieved by the increase in exports of medium-sized companies, which was 2.1% (Ibidem, pp. 13, 14).

The provided examples of the contribution of small and medium-sized companies to economic growth and development of the economically most developed countries in Europe, Asia and America, as well as their contribution to the Republic of Croatia, indicates an immense significance of these companies, especially for small economies. The accomplishment of the economy of scale in countries with small domestic markets is not possible without export. The transition of small and medium-sized companies from domestic market operation to mini multinationals by expansion of their business activities onto the international market in both scale and scope, is a prerequisite without which small economies can hardly achieve economic growth.

6. CONCLUSION

The rapid technological advances and the decrease in transport and communication prices are the two processes happening simultaneously, especially in the 1980-s. Together with the process of liberalisation of international trade, they are the main forces behind the globalisation process. While at the start the majority of benefits from the process were enjoyed by the developed economies, the last few years have witnessed elimination of differences in size and economic power, both among the economies and the companies. Modern technologies have facilitated the global presence of small and medium-sized enterprises. By way of finding market niches and fast adaption to changes in the market, small companies are gaining significance in international exchange, share in GDP and creation of new jobs. This is especially indicated by the growing number of most developed economies in the world. This should be, now more than ever before, an opportunity for smaller, less developed economies, such as Croatia, for a faster economic growth. The promotion of setting up new companies, provision of consulting services, cheaper loans, market research via
chambers of economy, government agencies, economic diplomacy, government institutes and others would lead these countries to increase their share in international exchange, creating higher levels of employment and faster economic development. The mini multinational companies, not requiring a high concentration of capital or human resources as is the case with large multinationals, and considering that such concentration is difficult to secure in less developed, small economies, represent the best opportunity for a stronger integration of these economies in the international exchange of goods and services.

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ABSTRACT
Decision making process is widely researched by different professionals – mostly by psychologists, but philosophers, mathematicians, economists and some others as well. Unlike psychology, some disciplines see decision making process as a strictly rational process. One of them is economics, specifically finances. The assumption that managers will make financial decisions based only on facts and figures is usually false. Many empirical studies, as well as everyday experience show irrational behaviour of decision makers. Daniel Kahneman, psychologist, who shared the Nobel Prize for economics with Vernon L. Smith in 2002, improved the understanding of the behaviour of decision makers in economics. He has inspired many researchers to deal with it in interdisciplinary contexts. Behavioural finances, behavioural economics, behavioural corporate finances are concepts that have achieved a significant position in the field which has until recently been reserved just for economists or financial experts.

The paper will present the role of psychology in improving financial decisions and provide an overview of the significant research in behavioural finances.

The second part will present the results of a survey carried out in an investment fund. The survey simulated decision making situations for employees of the fund and examined whether they were resistant to flaws in thinking that could affect the quality of their decisions.

KEY WORDS: Behavioural finances, Decision making, Psychology.

1. INTRODUCTION
Psychology entered the field of economics very early – Martin Sewell from the University of Cambridge, who maintains the www.behavioral finance.net, cites several resources from which behavioural finances may have originated (Sewell, 2010). The first one is Gustav Le Bon’s book The Crowd: A Study of the Popular Mind, published in 1896! The second one is Selden’s Psychology of the Stock Market, published in 1912. Until the emergence of the works by Amos Tversky and Daniel Kahneman in 1973, only two authors are cited: Leon Festinger with his theory of cognitive dissonance (1956) and Pratt (1964), who contributed the concepts of utility functions, risk aversion and risk considered as a proportion of total assets.

Other authors (Ricciardi and Simon, 2000), with the main researcher Richard Thaler, define behavioural economics as the foundation of behavioural finances. According to them behavioural economics is the alternative to traditional economics since it applies psychology to economics. They define behavioural finances as a theory: the belief that psychological considerations are an essential feature of the security markets. It is a field that attempts to explain and increase understanding of how the emotions and mental mistakes of investors influence the decision-making process (page 7). The usual term is just behavioural finances, considered as normative analysis, which focuses on how individuals behave (CFU, 2012). Balthussen (2007) cites that behavioural finances aims at improving the understanding of financial markets and its participants by applying insights from behavioural sciences, mostly psychology and sociology. It is developed as a response to inability to explain market anomalies and investor behaviour by traditional models and theories in finances, sometimes called academic finances.
2. BASIC CONCEPTS OF BEHAVIOURAL FINANCES

Traditional finance paradigm is based on several assumptions:

1. People rationally optimize over all possible options considering all relevant assets and consequences. They can cope with large demands as they are capable of processing information and solving complex problems due to their high computational capabilities (Simon, 1955 in Baltussen, 2009).

2. People form expectations and beliefs that are in accordance with the laws of probability and update them correctly if new information arises.

3. People only value money or consumption and make decisions that will maximize their self-interest.

4. People are either risk neutral (do not care about risk), or dislike risk (risk averse) in all situations, regardless of the amount of wealth they could acquire.

Metaphorically, such people represent a concept of *homo economicus*. Traditional finance paradigms suppose that people make decisions based on Expected Utility theory by Von Neumann and Morgenstern (1944) if the objective probabilities are known or Subjective Utility theory by Savage (1954) if true probabilities are unknown and estimated subjectively. The former situation means deciding under risk while the latter includes uncertainty. In other words, these theories describe decisions as choices between alternatives that either have certain outcomes, or multiple possible outcomes the realization of which is not fully known in advance (Baltussen, 2009).

Actually, traditional finance sees people as rational, risk-averse and selfish utility maximizers who act in their own personal interest without regard to social values. It assumes that they act on efficient markets where prices reflect all available information (Kaplan, 2012). An important concept in this context is also Efficient market theory, dominant in academic circles around the 1970s. Many anomalies and deviations could not be explained by these concepts. At the same time, some psychologists started their research in that field of finance, inspired by obviously incorrect assumptions about human behaviour. It became clear that *homo economicus* is not a realistic concept and that *homo sapiens* act differently. They are limited in many ways: in their capability to solve complex problems, in processing information based on limited working memory and limited computational capabilities. Attention capability is also limited, which prevents them from performing multiple tasks simultaneously. In order to overcome these limitations, people must simplify the process so they use some rules of thumb or heuristics. That means that when faced with many options they do not weigh all the advantages and disadvantages of each of them, but eliminate some if they do not possess certain characteristics.

As Robert J. Shiller, the laureate of the Nobel Prize for Economics in 2013 said: “Academic finance has evolved a long way from the days when the efficient markets theory was widely considered to be proved beyond doubt. Behavioural finance – that is, finance from a broader social science perspective including psychology and sociology – is now one of the most vital research programs, and it stands in sharp contradiction to much of efficient market theory.” (Shiller, 2002).

How people behave when they have to make decisions that include finances has always been interesting. Elaborating the thinking and decision making process in his latest book *Thinking, fast and slow*, Kahneman (2013) cites that even the Swiss scientist Daniel Bernoulli in 1738 realized that the value of money depends on psychological value or desirability. He is the father of expected utility theory or hypothesis. It posits that utility of a risky distribution of outcomes is a probability-weighted average of the outcome utility. Kahneman started a series of studies with Amos Tversky. Their contribution to the behavioural economics and behavioural finances is huge. They started with testing the expected utility theory, and achieved an insight into human behaviour different from the basic assumptions of the traditional theory focused on a rational human. In 1973 they presented *availability heuristics*. In a situation when a person evaluates the frequency of classes or the probability of events he judges by availability, i.e. the ease with which relevant instances come to mind. In their next article, published in *Science* in 1974, *Judgement under uncertainty: Heuristics and Biases*, Tversky and Kahneman presented several key concepts. *Representativeness* means that people evaluate probability of an uncertain event by the degree to which it is similar in its main characteristics to its parent population. *Anchoring and adjustment* is heuristics that is used when people have to make numerical predictions. They usually make judgements by starting from an initial value (the anchor) that is subsequently adjusted to yield the final judgement. Using such heuristics lead to biases that had negative influence on the quality of their decisions. Even different framing of the same problem can affect a decision, depending whether the focus is on gains or on losses. The third article by Kahneman and Tversky was published in *Econometrica* in 1979. They discussed the weaknesses of the Expected utility theory and offered an alternative theory named the prospect theory. It states that people underestimate the outcomes that are merely probable in comparison with the outcomes that are obtained with certainty. People also generally discard components that are shared by all prospects under consideration. Instead of final assets, values are assigned to gains and losses. The crucial point is that people are much more motivated to avoid losses then they are motivated to reach gains. (See Fig.1)
It is interesting that this article is the most cited one ever in *Econometrica*. Kahneman said that the influence of their research on the economics would not have been the same if they had published the article in a psychological journal. Afterwards they enhanced it to cumulative prospect theory taking into account the level of risk, proving the pattern of risk attitudes: risk aversion for gains of moderate to high probability and losses of low probability, and risk seeking for gains of low probability and losses of moderate to high probability (Kahneman, Slovic, Tversky, 1982, in Kahneman, 2013) Kahneman is the first psychologist who was awarded the Nobel Prize in economics in 2002. Tversky had unfortunately passed away before that. They have a significant role in behavioural finances, and have inspired many other studies.

During the decision making process people form beliefs and preferences at least in part irrationally, often using heuristics. That often leads them to some cognitive errors and emotional biases.

As beliefs are concerned, several are important for investors. People are overconfident in their judgements. **Overconfidence** could be seen in the confidence intervals people assign to their estimates of quantities, and also we are poorly calibrated when estimating probabilities. **Optimism and wishful thinking** are seen in overestimating of favourable outcomes, but also in displaying unrealistically rosy views of their abilities and prospects (Weinstein, 1980, in Barberis and Thaler, 2002). **Conservatism** occurs when people hold on to a prior view or opinion and fail to consider new information adequately. Similar to that is **belief perseverance** – people hold on previously formed opinions too tightly and too long. That makes them avoid any evidence that contradicts such beliefs. If faced with any, they tend to treat them with excessive scepticism.

One of the views of the most important biases in behavioural finances is presented in Table 1.

<table>
<thead>
<tr>
<th>Bias</th>
<th>Definition</th>
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<tbody>
<tr>
<td>Overconfidence</td>
<td>Individuals believe that they are better then they really are</td>
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<tr>
<td>Excessive optimism</td>
<td>The frequency of favourable outcomes is overestimated</td>
</tr>
<tr>
<td>Anchoring</td>
<td>People anchor on an unimportant number and adjust insufficiently</td>
</tr>
<tr>
<td>Mental accounting</td>
<td>Deciding based on different accounts</td>
</tr>
<tr>
<td>Bounded rationality</td>
<td>Decisions are not rational because individuals are limited in their cognitive abilities and have incomplete information</td>
</tr>
</tbody>
</table>

Ricciardy and Simon (2000) listed 36 topics that are relevant for behavioural finances and that should be taught in classrooms. This work cannot include all of them. Park and Sohn (2013) took the list and searched only the Social Science Research Network for articles that have studied them in the past 30 years. Preferences are studied in 4,770 articles, fear in 2,103, and over 1,000 concern market inefficiency, behavioural economics, framing and issues of knowledge. Less than 100 studies deal with the topic of illusions of control, contrarian investing fads, manias and information overload. They
also analysed a number of articles in seven premier finance journals during 1990-2010. Although articles on finance and economics prevail, behavioural finances are presented in a respectable proportion, from 31 in Financial Management to 214 in Journal of Banking and Finance.

The first large-scale international survey of risk preferences, conducted in 45 countries, showed great differences in risk aversion, loss aversion and probability weighting. Risk attitudes depend on economic conditions but also on cultural factors (Rieger, Wang and Hens, 2011).

Behavioural finances definitely deepened the knowledge of financial markets. Decision makers in finances can benefit a lot by education in this field. That means small investors, portfolio managers, board of trustee members, portfolio of investors (mutual funds), groups of shareholders, financial institutions and non-profit institutions (universities).

Richard Thaler predicted the end of the behavioural finances in 1999. He wrote: “Behavioural finance is no longer as controversial a subject as it once was. As financial economists become accustomed to thinking about the role of human behaviour in driving stock prices, people will look back at the articles published in the past 15 years and wonder what the fuss was about. I predict that in the not-too-distant future, the term “behavioural finance” will be correctly viewed as a redundant phrase. What other kind of finance is there? In their enlightenment, economists will routinely incorporate as much behaviour into their models as they observe in the real word. After all to do otherwise would be irrational.” (In Bloomfield, 2010, p.15). Fifteen years have passed since then and behavioural finance concept is still alive and recognized as important for all decision makers. The change is that there is a consensus among researchers and professionals that behavioural finances should not and cannot replace the traditional model, but should function as its complement. Mitroi and Oproiu (2014) say that “behavioural finance complements but not replaces technical and fundamental analysis by systematic analysis of the fundamentals of the market prices as a result of the correlation between investor experience and expectations and the market momentum” (page 154).

Thaler’s assumption that the insight into the role of psychological factors in decision making processes in finances will be enough to prevent biases and mistakes is optimistic but rational. That is why financial institutions and universities should include lectures in behavioural finance in their curricula (Garcia, 2013). CFA Institute included a very detailed module on behavioural finances in their exam for brokers and other financial institutions’ employees.

It is assumed that people who are experts in a certain area will be objective and make decisions in the best possible way. Empirical proof shows that experienced experts are indeed better than the beginners in their areas of expertise, but also that they tend to be biased and inconsistent in decision making, i.e. that they make mistakes in the decision making process. (Kahneman, Slovic and Tversky, 1982). Vučković (2010) also says that overconfidence and excessive optimism occur more frequently with the managers with a lower level of education, as well as with those highly positioned in a company’s hierarchy.

3. RESEARCH RESULTS

The goal of the research, conducted by the authors, was to establish whether the decision makers in finances who are familiar with the essentials of behavioural finances will act in accordance with the traditional model.

The respondents are the employees of a Croatian investment fund, 20 in total, 11 male and 9 female. It is the fund’s policy that optimal results are achieved by combining youth with experience. Therefore 45% of these employees are aged 29 or younger, whereas 30% are over 40. Their work experience is in accordance with their ages. Significant emphasis is put upon education and training and the compulsory examination all the employees take includes a very detailed and demanding module on behavioural finances.

A survey questionnaire was designed, in which key tasks aimed to test the employees’ decisions in the context of several essential behavioural finances concepts. Questions are either based on the previous research, or taken from them in original form (Busic, 2008, Rieger et al., 2011). Here is the choice of the most important questions and findings of the survey.

4. Question: What would you rather take: 3000 Kunas now or 4000 Kunas next month?

The objective was to gain an insight into the concepts of consumption and savings. The traditional model is based on the assumption that all investors are patient and will persevere in saving. In such a case the reward of 4000 Kunas next month would be more desirable. However, 35% of the respondents chose the other option.
5. **Question:** You have won 100 million in the lottery and have been offered two options for the payment. Which one will you choose: 50 million immediately, or 100 million over the course of 20 years?

This question follows up upon the previous one. The traditional model assumes that people have self-control and that they will patiently take payments over 20 years. Nevertheless, the research shows that somewhat over half the respondents preferred to get 50 million immediately in order to have the free use of the money today, to spend it and enjoy life. Naturally, there is also another option - to invest the 50 million and earn much more than 100 million over the next 20 years.

Although questions 4 and 5 are fairly similar, there are certain aberrations in the responses. If the traditional model were right, then all the respondents would be patient and accept the payment in the future. It is interesting that in this question more respondents want to be paid immediately, while in the previous one the respondents agree to be patient and be reimbursed in the future. Furthermore, several respondents provided different responses to these two questions, i.e. in one situation they would agree to be paid in the future, whereas in another they would want immediate payment. This could be regarded as a behavioural mistake, and points to the faults in the traditional model, which regards all the decision makers as rational people who have the necessary knowledge and information to make the correct decision every time.

6. **Question:** You are employed in a company and are satisfied with your job, but you believe you are due for promotion, which eludes you. A very big project, with a great deal of risk, but also with great rewards, is planned. If the project is successfully carried out, you will be promoted, if it fails, it is almost certain that you will be fired. In case you decide not to take part in the project, everything remains as it is now. How certain are you that you would get involved in the project?

The traditional model assumes that investors are always risk averse and that they always make 100% safe decisions. However, the behavioural model disagrees with this theory, and rightly so, as this research proves. In spite of the fact that in this case the risk is very high, 35% of the respondents replied that they would probably take the risk since the reward was also high.

7. **Question:** It is likely that you will gain some money, but you are offered two options. Which one would you choose: a certain payment of 100 Kuna now or 50% chance that you will get 200 Kuna - 50% chance that you will not get anything?

This question confirms the theory that investors do not always behave rationally and that they are not always risk averse, but willing to take risks when they may result in potentially greater gains. The first option was chosen by 75% of the respondents.

8. **Question:** Would you get involved in a project in which you might lose everything if the likelihood to get rich were 90%?

12. **Question:** Would you get involved in a project that would provide financial security until the end of your life if the likelihood that you would stay alive is only 10%?

These two questions can be discussed together. The goal was to prove that people make decisions depending on how something is presented (heuristics of framing). All the respondents are experts in making financial decisions and most of them have been educated in the essentials of behavioural finance, therefore they generally did not make mistakes in these two questions, i.e. their answers did not vary depending on the phrasing of the questions. Nevertheless, two respondents changed their decisions in accordance with the questions’ phrasing. In response to one of them they replied they would get involved in the project, while when answering the other they stated that they would not. Both respondents have insufficient experience so they did not recognize the fact that the questions were two different presentations of the same task. More experienced decision makers probably recognized the trap described in the prospect theory.

It would be useful for future research to find out how financial experts who have not been educated in psychological influences on making financial decisions would respond to the above questions, as well as to see the responses of those experts whose financial decisions are limited to the individual level of managing personal finances. Naturally, if the survey had been given to people who are not decision making experts, more mistakes would have been expected, i.e. they would have provided different answers depending on the presentation of the task.
9. Question: If you have played the roulette and you get a red number 10 times, which colour (number) would you play 11th time: red or black?

This question relates to representation heuristics. Namely, people very often succumb to the heuristics of representativeness and thus think that if the number has been red 10 times it is more likely to be black 11th time. Similarly, a gambler who has lost five bets in a row believes that the sixth bet has to be the winning one. In this research 60% of the respondents chose a black number, falling into the trap of representation heuristics. Although the chances were still 50-50, more respondents decided to bet on a black number.

10. Question: If you have played black and red in the roulette and have had 10 winning bets in a row, how much would you bet the next time? If you would place no more bets, write 0.

The question is phrased in such a manner as to test the emotional mistake called overconfidence. Namely, people are often overconfident in their decisions if their decisions have been successful in the past. Their overconfidence encourages them to invest more money. However, as all the respondents are experts in decision making, none of them showed overconfidence. Most respondents replied that they would place no more bets or that they would invest only 20% of the total budget. The fund in which the survey was carried out is one of the most successful retirement funds, possibly because its experts do not make mistakes common with “ordinary” people.

11. Question: There are 100 little balls of various colours in a basket. 30 are red, the remaining 70 are blue or yellow. The balls are randomly drawn from the basket and you are offered two options: a) If a red ball is drawn, you will get 100 Kuna, otherwise you get nothing.
b) If a yellow ball is drawn, you will get 100 Kuna, otherwise you get nothing.

Which option will you choose?

The traditional model assumes that investors always have perfect information at their disposal, i.e. that they have all the information necessary to make the right decision. The traditional model also assumes that decision makers act rationally in the decision making process. The question is put in such a manner that the respondents are not provided with all the relevant information. In other words, the basket contains 100 balls in three different colours. 30 are red, the remaining 70 are blue or yellow. At first it seems that the second option is more likely to be the winning one, as there are 70 balls, either blue or yellow, i.e. 35 yellow and 35 blue, whereas there are only 30 red ones. However, this is not true. The question does not provide the information on the ratio of the blue and yellow balls; therefore the first option would be more likely to be the winning one, and that is what 75% of the respondents realised. Nevertheless, 25% of the respondents chose the second option, although they did not have the precise information on the number of the yellow balls.

This research established that only 40% of the respondents are involved in high risk decision making. This is due to the fact that retirement funds follow the legal regulative regarding the instruments and limits of investment. The basic function of the fund is to grant the safety of the investments, thus the funds invest into low-risk financial instruments. When asked how often they make decisions based on intuition, which financial experts are fairly often forced to do due to the lack of information or time, 60% of the respondents replied that they sometimes make such decisions, while 40% said very rarely. What is interesting here is that the responses did not relate to work experience. Namely, intuitive decisions are better with more experienced experts, whereas such decisions are more likely to be wrong with the less experienced experts.

4. CONCLUSION

Despite the fact that the concept of behavioural finance is very well known in the world, in Croatia it is still mostly unfamiliar. The studies including the essential concepts of behavioural finance (i.e. risk attitude) are often interpreted on the basis of the traditional model only. Maybe the new book Uvod u bihevioralnu ekonomiju, edited by Polšek and Bovan will raise the interest of professionals for the discipline. The application of the behavioural model and a thorough understanding of the psychological side in the decision making process can help to explain and thus prevent some crises and contribute to achieving business success. According to the results of the research carried out so far, the traditional model postulates should not be abandoned altogether, but should be complemented by the insights gained in the behavioural finances model. Respective analyses of crisis, especially financial crashes, give insight into the application of
the behavioural finances tools (Shefrin, 2009). An interdisciplinary model has been applied to numerous fields, so there is no reason not to do so in finances as well. Such a recommendation is included in the Nobel Prize for Economics citation in 2013 by Robert Shiller, Eugene Fama and Peter Hansen.

Those economists, and especially financial experts, who are unwilling to study the area in detail would benefit by reading the excellent book by Daniel Kahneman Thinking Fast and Slow (2011), which was translated into Croatian and published last year.

Nevertheless, in order to accept advice from another field, there must be a need to do so. There are plenty of opportunities: the book Financial Economics – A Concise Introduction to Classical and Behavioural Finance, by Thorsten Hens and Marc Olivier Rieger begins by quoting an anonymous author: “Advice is the only commodity on the market where supply always exceeds the demand.”

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HOW AND WHY TO TEACH ENTREPRENEURSHIP INTERDISCIPLINARY? CASE OF JOSIP JURAJ STROSSMAYER UNIVERSITY LEGAL-ECONOMIC CLINIC OSIJEK
ANAMARIJA DELIĆ
SUNČICA OBERMAN PETERKA

ABSTRACT
Developing entrepreneurs, or teaching students how to behave entrepreneurially requires a complex set of activities that encompass wide range of knowledge, behaviours and motivation in the identification, evaluation and development of opportunities. This approach requires an equally complex combination of activities and methods that can allow students to understand the required entrepreneurial abilities. In creating this pedagogy, it should be taken into account that complexity of today’s global problems demands a multidisciplinary and cross-disciplinary approach in their solving. Complexity of today’s problems demands combination of skills and knowledge of different roles - of new type of professionals (i.e. both economist and lawyers at the same time), so called “hybrid professionals”. One of the ways to achieve all these educational goals is through experiential education, which provides just such a set of activities that allows teaching of complex situations and activities. Clinical-based education provides all above stated goals and objectives.

This article will present theoretical background for development of effective experiential educational pedagogy in entrepreneurship, based on good experiences and results of clinical-based education in law schools around the world. Clinical education is a common method of legal instruction developed to broaden legal education, which was traditionally focused mainly on systematic training in learning law. But lately clinical law education was criticized as too narrow, because it failed to develop knowledge and skills necessary for practicing law – entrepreneurial skills in students. Following the necessity to find appropriate learning approach that will allow adoption of complex knowledge, but also to amend criticism towards the existing teaching models, clinical-based education was recognized as the most suitable method. At the end of the article, Legal-Economic Clinic Osijek will be presented as a unique clinical-based training in law and business.

KEY WORDS: Entrepreneurship, Multidisciplinarity, Clinical education.

1. INTRODUCTION
Legal clinic, as well as teaching students through legal clinics is a well-known and recognized concept of education of students at most faculties of law throughout the world. Wilson (2009) finds the roots of clinical legal education in the United States in the late 60s and early 70s of the last century. In the US, clinical law education of students is considered an indispensable part of training of future lawyers, primarily because it provides students with training and insight into what awaits them after graduation.

Although clinical legal education has been adopted very quickly by all faculties of law in the United States, in Europe this form of teaching became used more significantly during the 90s of the last century. Various donors from the US, such as Ford Foundation and Open Society Institute (Wilson, 2009), have significantly contributed to the expansion and popularisation of clinical legal education. This form of teaching has its strongest “foothold” at faculties of law in Poland, where the model is modified and adapted to European standards, in particular to the exceptional influence of the German legal system, which has been used as a basis for the design of legal systems of most countries in transition. Later, the so-called “Polish model” expanded to other European countries. Today it is almost impossible to find education that does not incorporate this form of teaching students.

When we talk about the roots of clinical legal education, it is important to emphasize that it was primarily intended for those groups of the society that could not afford legal advice. Therefore, it is not surprising that the oldest and most widespread legal clinics are those are in the field of social rights. Over time, the focus of clinical education expanded to all other areas of law—family, commercial, etc.

Today there are several networks of legal clinics in the world, whose aim is the exchange of knowledge, information and research results (CLEA – Clinical Legal Education Association; GAJE – Global Alliance for Justice Education; AALS – Association of American Law Schools; CLEO – Clinical Legal Education Organization; Polish Foundation for Legal Clinics).
In October of 2013, the ENCLE (European Network for Clinical Legal Education) association was founded in Warsaw, whose goal is to promote clinical law education and the exchange of knowledge and experience gained in European legal clinics.

2. LEGAL CLINICS AND CLINICAL LAW EDUCATION

Term legal clinic has several definitions, but basically, as emphasized by Hovannisian (2004) the term refers to “any kind of practical teaching with the use of interactive methods to teach practical skills, or otherwise called lawyering skills to law students”. Clinical legal education represents a method of teaching, which draws on experiential learning, which encourages the adoption of new content with simultaneous development of personal skills. In the broader sense, clinical legal education encompasses both formal and informal educational programmes that contain practical-oriented, student-centred and problem-based methods. Skills that students are taught, clinical legal education include legal analysis and reasoning; legal research, factual investigation; communication; counselling; negotiation; litigation and alternative dispute resolution procedures; organization and management of legal work; and recognizing and resolving ethical dilemmas (Hovannisian, 2004).

Clinical legal education was created in response to law students’ long-lasting dissatisfaction with their education, which did not provide sufficient practical knowledge, as well as help regarding giving legal advice to those that could not afford them. New methodology has enabled a shift from the old curriculum that was content-focused, towards one that better served the needs of the labour market – outcome-focused programme of instruction. Learning through legal clinics is significantly different from the methods by which law is taught at the faculty, where students are focused on adoption of legal principles, laws, codes and regulations. In legal clinics, students work on live cases, gather data from real clients, and their work is under constant supervision of mentors – professors and/or practitioners, mostly lawyers. Through working and learning in legal clinics, students develop communication skills, learn how to listen and effectively conduct interviews with clients, and enhance their skills of research, writing and critical thinking (Quigley, 1995).

The objectives that are to be achieved through clinical legal education are variously defined by authors. Hovannisian (2004) identifies two main objectives of establishing and teaching students through legal clinics: teaching practical skills and professional responsibility to law students on actual cases under supervision of experienced professors and providing legal services to society free of charge. The charitable objective of clinical program is clearly expressed and defined in all legal clinics. In addition to these objectives, Wilson (2009) states another three goals that should be achieved by legal clinics, that is, the goals that an ideal legal clinic should have: academic credit for participation within the law school curriculum and case-work by students. Wilson (2009) places special emphasis on these two goals, which are not mentioned by Hovhannisian, and his explanation is in the direction of the need for more committed work, and greater need for practical work and exercises, such as medical students. It is interesting to note that all the other researchers in their papers (Quigley, 1995; Rekosh, 1998; Schlossberg, 2003; Alviar, 2008) perceive work in legal clinics as work and teaching of exclusively law students, even if the case is of the latest form of legal clinic – transactional law clinic, which will be discussed later.

Today, legal clinics are an important part of teaching of students of almost all the faculties of law in the world, and are considered a “window into the real world”. The benefits of learning through the legal clinic method, that is, clinical legal education are manifold – from easier and faster adoption of the necessary knowledge to the development of personal and professional skills and critical thinking.

However, criticising clinical legal education, Amsterdam (1984) states that despite the clinical legal education, legal education is too narrow because it failed to teach students how to practice law, and has not instilled practical skills in students necessary for independent performing of their legal profession, among which he primarily emphasizes the methods of critical thinking, planning and decision-making. Amsterdam (1984), as well as other researchers (Schlossberg, 2003; Robinson and Malach, 2004) state that it is necessary to introduce methods into education that allow students ends-mean thinking, hypothesis formulation and testing and information acquisition, but mostly decision-making in situations where options involve uncertain degrees of risks. The necessity of the adoption of these criticisms is confirmed by the increasingly complex social changes. Mitchell and James (1989) claim that these changes affect the relationships between people, their reactions to the resulting relationships, and the reactions to changes in the environment. Knowledge acquired at universities must answer the economic and legal questions in the new era – era of computerisation, globalisation and high technology (Jones, 2002). The problems that arise and are addressed in this environment require a different approach and a different methodology. Robinson and Malach (2004), as well as Specht and Sandlin (1991) see experiential learning as a response to pressures from the environment because it allows acquisition of knowledge and understanding of situation through transformation of experiences from the real environment. The basic premise of experiential education includes a wide spectrum of activities that accompany dynamic interaction between the individual and the environment, which
is necessary for good understanding and solving of problems. However, aside from the necessary interaction with the environment, Joplin (1995) argues that the process of reflection is extremely important for the success of experiential learning. She has developed a five-step model, which ensures the maximum effect of this method of teaching: focus, action, support, feedback and debrief. The first step, focus, through presentation of the task ensures keeping the attention on the task itself, and planning future steps. The second step, action, places the learner in an unfamiliar, stressful situation, requiring new skills or usage of new knowledge. Robinson and Malach (2004) state that in this step exceptional interaction with the environment is expected from students – observation, analysing of the problem, emotional connection. In the third step, support, supervisor must provide support to students in the application of new knowledge and solutions, while the fourth step, feedback, is necessary for providing information to students about their results related to the given task, as well as guidelines for future solutions. The final, fifth step, is actually a step in which the learning is recognized, articulated and evaluated (Joplin, 1995). Both Joplin (1995), and Robinson and Malach (2004) especially emphasize this final step because it allows for more reflection, compared to other teaching methods.

The experiential learning method is successfully applied in clinical legal education, which is confirmed by more than 800 legal clinics at faculties of law in the United States, where clinical legal education has attained the status of mainstay of legal education (Wilson, 1991-1992). Some 100 legal clinics have been established in the European Union, and more recently (Wilson 2009, cites 2010 as the beginning of serious work in the field of clinical legal education) also in China. This trend of new pedagogy, which moves away from traditional teaching to more experience-based methods, better understanding of concepts and stronger application of knowledge (Specht and Sandlin, 1991; McMullan and Boberg, 1991) creates more relevant context for knowledge within the individual (Robinson and Malach, 2004). New pedagogy allows a multidisciplinary approach, which is becoming imperative in creating individuals who will be able to combine the responsibilities and talents of multiple roles – hybrid professionals, i.e. both economists and lawyers at the same time (Kleiber, 2001). At the same time, new legal clinics are organised – transactional law clinics, whose aim is to offer many opportunities for interdisciplinary education (Schlossberg, 2003). These legal clinics combine knowledge from different professions in an attempt to solve the increasingly complex problems of the environment, exposing students to problems solving of which requires multidisciplinary approach. Students need to seek advice or solution in other professions and sciences, for which they consult, under lawyers’ supervision, with other experts.

Business changes affect lawyers’ relationships with their clients more than legal clinics are able to offer. Transactional law clients have become more sophisticated and expect lawyers to have business knowledge, also (Schlossberg, 2003). The strategy for solving clients’ problems includes consultations with experts in the fields of business, engineering, architecture and urban planning (Weinstein, 1999). However, Schlossberg (2003) concludes that educators’ task is to devise programmes that will allow students to explore the relationship between lawyers and other professions which is very real and important part of the practice of transactional law. More and more researchers are suggesting that legal clinics should be teaching specific skills and knowledge in the fields of business and entrepreneurship – Amsterdam (1984) proposes teaching skills such as counselling and negotiations, while Mixon and Otto (1994) and Weinstein (1999) state that in order to effectively address problems, students have to learn the art and skill of collaboration. Legal clinics still, as claimed by Salsich (2000) do not recognize the value of collaboration as a skill for problem solving, and therefore do not emphasize it in their teaching. Sturm (1997) in turn explains that these skills are necessary to meet the growing demands of the workplace. Therefore she suggests a new model of legal education – “gladiator model”. This model celebrates analytical rigor, toughness and quick thinking. On the other side, our job, as educators is to provide learning experience that is contextually, ethically and intellectually dynamic (Schlossberg, 2003).

2.1. Entrepreneurship and legal clinics

Changes in the environment, especially those of economic nature, as well as the trends that followed afterwards, have put entrepreneurship at the forefront. Entrepreneurship has proven itself as a solution to unemployment, creation of new values, economic growth, but also as an economic opportunity for all. Entrepreneurship has become, especially for vulnerable social groups, “an alternative means of escape from poverty” (Suggs, 1995). It was therefore necessary to satisfy the need that emerged on the market – to provide equal access to economic opportunities (Hauber, 2007). Equal access to opportunities was possible only if everyone had access to the necessary resources, especially information and advice. Entrepreneurial infrastructure (entrepreneurship centres and incubators, technology development parks, as well as development agencies) did not have legal advice in its portfolio of services, which are necessary for start-up entrepreneurs, but, because of high attorney fees, inaccessible from experts – attorneys. The first clinics that offered this type of advice (small business clinics), related to commercial law were established in the United States at the end of the 1980s. Today, there are around 150 of them in the US.

With increasing awareness of the importance and necessity of entrepreneurial activity and enterprising behaviour, the concept of small business clinics expanded to Europe, retaining the same principle of operation and methodology.
The importance of these clinics primarily reflects in the response to previous criticism directed to the pedagogy of clinical legal education. These clinics provide students with business-oriented, practical skill training (Dent, 2009), such as interviewing, researching, drafting, counselling, problem-solving and other areas of expertise (Curcuru, 2009). In relation to other legal clinics, students participating in the work of small business clinics serve the legal needs of a small business (e.g. entity formation, tax, sources of financing), prepare documentation for these needs (e.g. registration documents, contracts) and have opportunity to acquire professional skills (interviewing, researching, counselling).

In a very short period of time, small business clinics have experienced a real boom. According to data from Marion Kaufman Foundation, around 30 such clinics have been established in just ten years. Although the demand for advice offered by students and supervisors is great, critics have an entirely different vision of content, methodology of work and pedagogy that is used in these clinics. One of the loudest criticisms is related to the very methodology of work. Namely, majority of students’ advisory work is performed orally, which leaves them neither space nor opportunity to practice an extremely important skill – drafting (Statchen, 2011). The methodology used in these clinics demands greater attention and involvement of supervisors – from problem definition, allocation of tasks, research and presentation of solutions to problems. The role of mentors in these clinics is much more pronounced, because they have the knowledge that students cannot obtain or adopt during their work in a small business clinic. Ultimately, one of the biggest critics of these types of clinics, Gilson (1984) asks the question why these clinics have done such a bad job in training business lawyers.

2.2. Is there place in clinical legal education for a legal-economic clinic?

The role of legal clinics, as well as that of specialised legal clinics, such as small business clinics is extremely important in promotion of justice for all, but especially economic justice than can be gained through eliminating of imbalance of social and economic power (Hauber, 2007). By providing free legal advice, especially in the field of entrepreneurship, they greatly help start-up entrepreneurs to overcome entry barriers, which decreases the mortality of small enterprises in the start-up phase. However, criticism of pedagogy and methodology of work in these clinics raises questions about possibilities for improvement, not only for end users, but also for students involved in the work of the clinic.

The thing that critics of the pedagogy of legal clinical education agree upon is the fact that faculties of law, even through a system of legal clinics, cannot provide quality business education, that is, entrepreneurial knowledge and skills to students. Entrepreneurship is, as defined by Shane and Venkatamaran (2000) a complex set of activities that encompass a wide range of knowledge, behaviours and motivations in the process of opportunity identification, evaluation and development. Therefore, it is necessary to engage an equally complex set of activities in order to develop “entrepreneurs”. Experiential learning, with a multidisciplinary approach, has so far proved to be the best method of adopting entrepreneurial knowledge and skills, although there are still great debates on the methods of teaching and pedagogy that is used for teaching entrepreneurship. Hindle (2007) states that the pyramid approach is still dominant in teaching entrepreneurship, in which law is the link between basic business knowledge and skills and the corporate strategy, which should be the crown of the acquired knowledge and skills (and usually called “capstone strategy”). Corporate strategy offers “linking perspectives” to students useful for seeing the relationships between all the other subjects (Hindle, 2007), including law.

Figure 1. The pyramid approach to business education

![Figure 1. The pyramid approach to business education](source: Hindle, K. (2007), Teaching entrepreneurship at university: from the wrong building to the right philosophy in Fayolle, A: Handbook of Research in Entrepreneurship Education, Volume 1, A Generic Perspective, Edward Elgar Publishing Limited, UK, p. 118.)
McMullan and Long (1987), as well as Birch (2004) consider this pyramid approach to entrepreneurial education to be extremely sterile. Knowledge that is offered to students is given in segments, which, except for the corporate strategy course, remain unconnected. Hindle (2007) warns that boundaries are not crossed. This group of researchers advocates education in which boundaries between all subjects should be flexible and crossable, in which intimate union of practice and theory should be achieved (Whitehead, 1929) because intellect does not work best in a vacuum.

What these researches bring as their research findings can be summarized in six mandates of entrepreneurial learning. Entrepreneurship ought to be taught: experientially; creatively; joyously; respectfully; adaptively and- dare one say it – entrepreneurially (Hindle, 2007). In doing so, entrepreneurship should not be taught only at the faculty – entrepreneurship is taught in different places and in different ways.

In an effort to adopt and implement criticisms and results of these research studies, and bearing in mind that entrepreneurship is holistic by nature, faculty can provide and optimal learning experience by incorporating multidisciplinary clinical experience into their curriculum (Robinson and Malach, 2007). Furthermore, this, multidisciplinary education enables students to acquire knowledge from different fields and sciences, which is crucial for solving the problems of clients, networking and strengthening their personal competitiveness in the labour market.

2.3. Josip Juraj Strossmayer University Legal-economic clinic Osijek

Legal-economic clinic of the Josip Juraj Strossmayer University of Osijek is a joint project of the Faculty of Law and the Faculty of Economics in Osijek. The Legal-economic clinic project is an initiative of the Department of Commercial Law of the faculty of Law in Osijek1 and the Faculty of Economics in Osijek. The clinic was founded in November 2013, through signing of an Agreement on Cooperation between Faculty of Law in Osijek, Faculty of Economics in Osijek, Business Incubator BIOS Osijek (BIOS in further text), and Center for Entrepreneurship Osijek. The agreement defines the goals and means of cooperation – active and direct participation in solving specific legal and economic cases or problems, thus providing an opportunity to students to deepen the acquired theoretical knowledge in practice, which also contributes to the system of providing free legal and economic assistance. Cooperation is accomplished through various forms, including: students’ work in solving specific problems, providing legal and economic consulting to clients and business associates of BIOS and Center for Entrepreneurship Osijek, work on joint (scientific and economic) projects and business solutions, and performing other tasks, appropriate to the knowledge and skills of students.

The role of partner institutions in the work of the Legal-economic clinic is of paramount importance because BIOS is a meeting place for entrepreneurs and students, where in addition to working in the Clinic, students have the opportunity to see and feel the “real world” through work of BIOS’s tenants, and socializing and solving of problems/cases in the so-called coworking space. The agreement stipulates that both partners, BIOS and Center for Entrepreneurship Osijek, besides providing clients and space, will actively participate in mentoring work with students.

Legal-economic clinic Osijek was founded for several reasons. The first and principal reason is to give students an experiential learning opportunity by working in a clinical setting with entrepreneurs (Robinson and Malach, 2007). This is also an excellent opportunity not only to apply the acquired knowledge in practice, but also to perceive problems from a different angle, that of other profession. Students of both faculties are involved in the work of the Clinic, and they work in mixed teams to provide to local entrepreneurs access to legal and business advice. Peculiarity of the Clinic is reflected in the multidisciplinary approach to each problem/case, which allows entrepreneurs not only to solve the problem, but to receive advice on their business as well. This approach also offers much more to students than classic clinical legal education – multidisciplinary approach allows them to learn from each other, solving problems using the knowledge of the other profession, thereby acquiring skills such as interviewing, data collection and analysis, teamwork, networking, consulting to entrepreneurs and writing reports on activities and cases.

Legal-economic clinic Osijek was founded without funding or investment of any of the partners. Everyone involved in the work of the Clinic, mentors and students, as well as associated partners, operate on a voluntary basis. When defining the pedagogy of education in the Legal-economic clinic, experiences of clinical legal education from around the world were used, especially experiences of legal clinics and mentors that are members of the ENCLE network. But, since this form of clinical legal education is unique in the world, considering the teamwork of students from both faculties, also used were the experiences that have proven as the best solutions in entrepreneurial education. Acknowledging the criticism of researchers of clinical legal education, students have also acquired counselling and consulting knowledge, which are considered to be extremely important for development of a career in law, which were taught by professors of economics.

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1 In the 2002 – 2007 period, a legal clinic operated at the Faculty of Law in Osijek, which was focused on commercial, civil and European law. But, because of lack of financial support, the clinic ceased to exist.
Participation in the work of the Legal-economic clinic is currently available to students of the first and second year of graduate studies of both faculties February – June 2014 period, 80 of them worked on 20 cases. So far, only the best students of both faculties have been eligible for work in the Clinic. Students have worked in five-member teams (which were comprised of three students from the Faculty of Law and two students from the Faculty of Economics). Each team had two mentors, one from each field. The mentors included professors from both faculties, employees of the partners (Center for Entrepreneurship Osijek and BIOS), Osijek lawyers, judges of the Commercial Court in Osijek and members of the Croatian Employers’ Association (CEA) Osijek. In addition to students’ teamwork, it was necessary to ensure mentors’ teamwork in order for the environment in which students solve problems to be truly interdisciplinary.

The organisation of work and rules of conduct in the Clinic were defined together with the students. At the very beginning of work, students have, in mixed teams, made decisions on the marketing plan of the Clinic, applied projects for financing the work of the Clinic, put together questionnaires that are used in work with clients, as well as the Code of Conduct in the Clinic. Their involvement in these activities resulted in a greater connection both with the Clinic and each other, which they have deemed a good opportunity for networking and getting to know each other. The Clinic works with clients on Wednesdays for two hours, at the premises of BIOS, and interviewing entrepreneurs and data collection are monitored by two mentors. After that, the team analyses the problem together with the mentors and tasks for further research and solving of the problem are assigned. Sometimes, problems are more of legal and less of economic nature, and vice versa, but students go through all the stages of problem solving together. In so doing, they consult with the mentors. After drafting the first, mutually agreed version of the solution, the team meets and the solution is analysed and evaluated. After mentors’ approval, team members put together the solution, that is, suggestion for solving the problem and send a written response to clients. In this way students practice writing reports, answers and solutions in advance, which is a part of everyday work of every lawyer. Teaching and teamwork are carried out at the premises of BIOS, in libraries of both faculties, in law firms, and the least in lecture halls, which also adds to the dynamic and attractiveness of the approach.

The methodology of work is based on principles proposed by Robinson and Malach (2007). In the first step (focus), after interviewing the client, mentors present the task and keep students’ attention on the problem. The second step (action), places students in an unknown and stressful situation, especially the students who have no knowledge in the field in which the solution needs to be sought. This is a situation in which they are forced to acquire new knowledge and look for new solutions. The third step (support) entails consulting with mentors, who evaluate the offered solution to the problem, and give students their opinions and concrete proposals for corrections (which would be the fourth step, which we call feedback). The fifth step (debrief) is the step in which information about the problem is exchanged, each individual step is discussed, as well as the emotional side of the experience of working in an interdisciplinary team, which is sometimes extremely difficult and demanding. Students and mentors communicate through e-mail, Clinic’s webpage and via social networks.

The establishment of the Clinic, because of its specific interdisciplinarity, has been covered by numerous media with great interest, and ENCLE plays a great role in its international promotion. This media attention, as well as the webpage of the Clinic, helped in connecting with the Clinic’s end users – local start-up entrepreneurs. Students have dealt with issues of establishing craft businesses, limited liability companies, simple limited liability companies, employment of people with disabilities, establishing a craft business abroad, obligations of tax and contributions payment, difference between service contract and author’s contract, marketing plan for a start-up company, and market analyses. All the questions have been analysed in detail and the documents required for establishing a company prepared. Commitments were fulfilled on time and in accordance with the highest ethical and professional standards.

At the end of May 2014, a survey was conducted with the aim to examine the level of students’ satisfaction with the work of the Legal-economic clinic. 33 students participated in the survey (72% students of the Faculty of Law and 28% of the Faculty of Economics). The reasons for their joining the Clinic were acquiring new knowledge and experience (27%), linking theoretical knowledge with practical examples (24%), expanding the network of contacts (19%), and the opportunity to test and apply the knowledge acquired at the faculty (18%). Their assessments are the best evidence to what extent have their objectives been achieved, that is, reasons for joining the Clinic. Students consider that work in Legal-economic clinic helped them the most to expand their network of contacts and acquire practical knowledge not included in programme of faculty education. These results are in accordance with their further responses, that is, satisfaction with working with mentors and communication within the team.

From the mentors’ perspective, students were more involved in the work in the Clinic than is the case in working with other methods of teaching, such as case-study, guest lecturers, etc. Although students become networked extremely fast, mentors played an important role in teaching teamwork, to which students of economics are more prone than students of law (Schlossberg, 2003). This can be explained by the fact that students of economics are taught teamwork, rules and benefits of working in a team at all levels of education. On the other hand, analysing problems, searching through available data, as well as possible solutions to the problem were the “strong suit” of students of law. Mentors’ assessment of the overall satisfaction with the work of the Legal-economic clinic is consistent with the level of student satisfaction.
Legal-economic clinic is only the first step in experimental, clinical legal education at the Josip Juraj Strossmayer University of Osijek. The idea is to involve as many mentors and students from different faculties (electrical engineers, psychologists) in the work of the Clinic, so as to enable collaborative problem solving to meet the complexity of future clients demands (Schlossberg, 2003).

3. CONCLUSION

Experiential, interdisciplinary, clinical education is a new pedagogy that is used in teaching students at the Josip Juraj Strossmayer University of Osijek. This new approach allows students to interact with real clients, provides insight into real problems of start-up entrepreneurs, work with students and mentors of other professions and possibility for networking, both with each other and with entrepreneurs.

On the other hand, criticisms of current clinical legal education point to the need for changes in curricula (not only) of legal education. To meet the needs of the labour market and to enable students to acquire knowledge and skills that will help them respond to rapidly changing demands and complexities of our modern world, educators need to provide the conditions in which students will gain the necessary knowledge. Past results indicate the necessity of interconnecting as well as integrating knowledge from different professions, but also more opportunities for students to reflect on the acquired knowledge.

Small and medium-sized enterprises must respond to the same demands of the rapidly changing legal, business and technological environment. In order to properly respond to these demands, they need complete answers, in which knowledge from different professions is intertwined. Educators must teach students those skills and knowledge with which they will be able to respond to these requirements, and contribute to creation of new value, new jobs and economic growth in general. Multidisciplinarity arises as a logical solution to all of these needs and requirements. In combination with entrepreneurship, which is holistic by nature, space opens up for new pedagogy and new methods of work that can greatly increase the level of satisfaction with the knowledge acquired at faculties, as well as satisfaction with application of acquired knowledge in practice.

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FISCAL AUSTERTY AND PUBLIC SECTOR PERFORMANCE: CITIES IN SLOVENIA
PRIMOŽ PEVCIN

ABSTRACT
The applications of the performance measurement in general are growing in the amount in recent years. This paper assesses the efficiency and productivity of Slovenian cities in recent years, when economic slowdown was accompanied by increased fiscal austerity. The estimation of the efficiency is based on contemporary non-parametric linear programming technique, and panel data is utilized. This enables the assessment of dynamic efficiency and productivity changes during the report period, and these changes can potentially be decomposed into technological change and technical efficiency change. The results indicate that fiscal austerity negatively affected in particular technological change in the form of the inward shift of production frontier of cities, and this subsequently negatively affected also overall efficiency and total factor productivity levels of cities.

KEY WORDS: Performance measurement, Public sector, Cities.

1. INTRODUCTION
Several different concepts of performance indicators exist (see Steering Committee for the Review of Commonwealth/State Service Provision, 1997). The first one is efficiency, which describes the success with which a unit under observation uses its resources to produce outputs. The second concept is effectiveness, which denotes the extent to which produced outputs meet the given objectives set by the observed unit or external stakeholders. And the third one is productivity, which is simply the ratio of outputs to inputs, so the productivity change describes the difference between output and input growth. Performance measurement is rather universal, although relevant input and output variables selection needs to be specified for the efficiency and productivity estimation in the particular sector in order to generate benchmarks.

Interestingly, under the circumstances of fiscal austerity, policymakers are very inclined towards reducing costs of public sector organizations; and this means that technical aspects of operation are usually targeted. Consequently, increased efficiency and productivity of units under observation should be achieved. This is also true for the sub-national government level, where the research is specifically particularly intensive (see Balaguer-Coll, Prior and Tortosa-Ausina, 2013). Therefore, this empirical paper would like to assess productivity change for 10 Slovenian cities for the time period 2009-2012, when Slovenia experienced economic slowdown combined with fiscal austerity, which should also affect their productivity.

2. METHODOLOGY AND RESULTS
2.1. Methods and data
Productivity measurement involves a comparison of actual performance with optimal performance located on the relevant “best-practice” frontier. In particular DEA (Data Envelopment Analysis) method has become very popular in the evaluating productivity changes in the public sector (Ruggiero and Vitaliano, 1999). This method also enables the analysis of panel data, those including data for various observed units in different time periods. In particular, the Malmquist Productivity Index approach, which is based on DEA methodology, became very suitable for estimating productivity change, especially if prices are missing. The methodology enables the calculation of total factor productivity index to measure productivity change, and this change can be decomposed into technological change and technical efficiency change (Barros, 2006). This methodology is utilized in the study as productivity change is estimated for the sample of 10 Slovenian cities by utilizing panel data for 2009-2012 periods, when yearly data are provided for relevant inputs and outputs.

The inclusion of input and output variables utilized in the analysis is predominantly based on the literature dealing with local government efficiency (see, e.g. Stastna and Gregor, 2011). This study utilizes total current expenditures of the urban municipalities as the input variable, and values for 2010, 2011 and 2012 are deflated to 2009 levels by using GDP deflator. Output bundle is represented with following by variables: the total population of municipality; the number of children attending public kindergartens; the number of pupils in public primary schools (nine years program); the number of population over 65 years; the number of construction permits issued by the municipality; and the amount of waste collected by public waste...
The utilization of those variables also tends to describe the most important responsibilities of the Slovenian cities with respect to the social, educational, planning and infrastructure services they need to provide for their residents. For the assessment of the total factor productivity change, input-orientated Malmquist productivity change index is estimated. This approach is quite common in the studies on local government efficiency, where expenditures are taken as input variable (Lo Storto, 2013). A specialist DEAP program version 2.1, developed by Coelli (1996), is used to estimate total factor productivity.

Table 1. Descriptive statistics, input and output variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Average</th>
<th>Std. deviation</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total current expenditures (in EUR)</td>
<td>5,731,952</td>
<td>2,893,567</td>
<td>2,173,046</td>
<td>13,275,368</td>
</tr>
<tr>
<td>Total population</td>
<td>42,904</td>
<td>26,535</td>
<td>16,787</td>
<td>112,642</td>
</tr>
<tr>
<td>Number of children in public kindergartens</td>
<td>1,606</td>
<td>911</td>
<td>574</td>
<td>3,926</td>
</tr>
<tr>
<td>Number of pupils in public primary schools</td>
<td>3,175</td>
<td>1,684</td>
<td>1,425</td>
<td>7,304</td>
</tr>
<tr>
<td>Population over 65 years</td>
<td>7,446</td>
<td>5,419</td>
<td>2,427</td>
<td>22,396</td>
</tr>
<tr>
<td>Number of construction permits issued</td>
<td>44</td>
<td>30</td>
<td>8</td>
<td>130</td>
</tr>
<tr>
<td>Amount of waste collected (in tons)</td>
<td>19,548</td>
<td>13,301</td>
<td>3,707</td>
<td>58,939</td>
</tr>
</tbody>
</table>


2.2. Results and discussion

Table 2 presents the Malmquist productivity indices. All those indices are relative, which means that municipality might be more or less productive, but only in reference to the other 9 municipalities. Values below one describe the decrease in productivity or efficiency, whereas values above 1 improvements in productivity or efficiency. Columns of the table present technical efficiency change (MTE), technological change (MT), and total factor productivity change (MTFP). The last column (MTFP) presents the productivity change over the period, and this change can be decomposed into “catching-up” effect, i.e. technical efficiency change (MTE), and into “innovation or frontier shift” effect, i.e. technological change (MT).

Table 2. Malmquist productivity indices, Slovenian cities 2009-2012

<table>
<thead>
<tr>
<th>Year</th>
<th>(M_{TE})</th>
<th>(M_T)</th>
<th>(M_{TFP})</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>0.978</td>
<td>0.860</td>
<td>0.840</td>
</tr>
<tr>
<td>2011</td>
<td>0.983</td>
<td>0.997</td>
<td>0.979</td>
</tr>
<tr>
<td>2012</td>
<td>1.001</td>
<td>1.016</td>
<td>1.017</td>
</tr>
<tr>
<td>Mean</td>
<td>0.987</td>
<td>0.955</td>
<td>0.942</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>City</th>
<th>(M_{TE})</th>
<th>(M_T)</th>
<th>(M_{TFP})</th>
</tr>
</thead>
<tbody>
<tr>
<td>Celje</td>
<td>1.006</td>
<td>0.921</td>
<td>0.926</td>
</tr>
<tr>
<td>Koper</td>
<td>0.961</td>
<td>0.975</td>
<td>0.937</td>
</tr>
<tr>
<td>Kranj</td>
<td>1.000</td>
<td>0.980</td>
<td>0.980</td>
</tr>
<tr>
<td>Maribor</td>
<td>1.000</td>
<td>0.933</td>
<td>0.933</td>
</tr>
<tr>
<td>Murska Sobota</td>
<td>0.951</td>
<td>0.913</td>
<td>0.868</td>
</tr>
<tr>
<td>Nova Gorica</td>
<td>1.022</td>
<td>0.899</td>
<td>0.918</td>
</tr>
<tr>
<td>Novo mesto</td>
<td>1.000</td>
<td>1.008</td>
<td>1.008</td>
</tr>
<tr>
<td>Ptuj</td>
<td>0.991</td>
<td>0.975</td>
<td>0.966</td>
</tr>
<tr>
<td>Slovenj Gradec</td>
<td>0.954</td>
<td>0.962</td>
<td>0.918</td>
</tr>
<tr>
<td>Velenje</td>
<td>0.988</td>
<td>0.990</td>
<td>0.978</td>
</tr>
<tr>
<td>Mean</td>
<td>0.987</td>
<td>0.955</td>
<td>0.942</td>
</tr>
</tbody>
</table>

Source: Author
The results indicate that total factor productivity annual means decreased by 5.8% in the period 2009-2012 across the cities. In this case, the overall decrease in productivity over the period is composed of an average technical efficiency decrease (movement from the frontier) of 1.3%, and average technological regress (inward shift of the frontier) of 4.5% annually. Clearly, the decrease in productivity of Slovenian cities over the period 2009-2012 is more the result of contraction in the frontier relating inputs to outputs rather than in decrease of technical efficiency. If the results are observed by municipalities’ means, the only city that experienced productivity improvement is Novo mesto, where mean productivity improvement of 0.8% can be observed, which was composed of 0.8% technological gain. Other cities have experienced mean productivity decrease, and this decrease was largest in Murska Sobota (13.2%), of which 8.7% can be contributed to the technological regress (inward movement of the frontier) and 4.9% to decrease in technical efficiency (movement away from the frontier). Technological regress can be observed in all cities, except in the above mentioned case of Novo mesto. This obviously exhibits the lack of innovation leveraging the organizational factors. Moreover, in 6 out of 10 cities mean technological regress outpaced mean technical efficiency decrease. In essence, those cities experienced the deterioration of organizational factors when using inputs and outputs and their combinations as well as they need to adopt new technology in order to upgrade their organizational skills.

3. CONCLUSIONS

This study assesses productivity levels and productivity change for 10 Slovenian cities in the period 2009-2012. The results indicate that total factor productivity annual means decreased by 5.8% in the period across the cities, and the decrease in productivity of Slovenian urban municipalities during the report period is more the result of contraction in the frontier relating inputs to outputs (i.e. technological regress) rather than in technical efficiency decrease. This obviously corresponds to the changes happening during the report period, when cities experienced decreasing demand for certain services that they need to provide for their residents (i.e., services that have highly pro-cyclical demand), but the lack of innovations deteriorated organizational skills that would enable adaptation to new circumstances. This might also help to explain a sudden decrease in total factor productivity in year 2010, when the economic crisis also affected the demand for public services provided at the local level. It might also be argued that input-output mix adjustment has some lag, since the reduction in the demand for local public services tends to outpace expenditure reduction.

LITERATURE


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THE IMPACT OF HEALTH EXPENDITURE TO THE HEALTHCARE SYSTEM EFFICIENCY
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JANA ŠTRANGFELDOVÁ

ABSTRACT
Health is the most precious human value. It contributes to the economic potential of the country and therefore requires the interest of both the state and the public authorities. How can countries really influence the health of their inhabitants? No doubt, appropriate number of hospital beds and practicing physicians are important. But what else? Health expenditure has a significant role in national economies. We examine healthcare systems efficiency in 27 European countries using Data Envelopment Analysis (DEA). Then we compare the impact of health expenditure per capita and the health expenditure share of GDP to the efficiency scores of compared countries. We show that the share may be preferable to use in DEA calculations, because it takes into account the “country’s wealth”.

KEY WORDS: Healthcare system efficiency, Health expenditure, Data envelopment analysis (DEA), Super slack based measure (Super-SBM).

1. INTRODUCTION
The paper focuses on the comparison of the efficiency of healthcare systems of selected European countries with respect to their economic performance. We calculate the super-efficiency scores to compare and rank the countries according to two alternative DEA models. The models differ just in one input variable. Once we consider health expenditure per capita, otherwise we take into account health expenditure as a percentage of GDP. We show how the different ways in which health expenditure can be expressed influence the healthcare system efficiency.

Health expenditure is a significant policy issue since it forms a substantial part of public and household expenses. Naturally, efficient use of public and private financial sources allocated in healthcare systems is expected by all stakeholders.

We define the efficiency of the healthcare system as the ratio

where healthcare outcomes characterise the health state of the inhabitants and healthcare inputs capture the main resources allocated in healthcare system. It is well known that healthcare systems can only partially influence the population health. However, in accordance with standard DEA terminology we will refer to healthcare outcomes as outputs of healthcare systems.

The study of healthcare system efficiency helps to estimate the contribution of various healthcare resources to the population health outcomes. Thus the evaluation of healthcare system efficiency is a complex and challenging socioeconomic problem.

Many researchers have focused on the measurement of efficiency in the healthcare. Different approaches were proposed regarding the inputs and outputs incorporated into the analysis. Retzlaff-Roberts et al. (2004) studied the impact of the social environment, population lifestyles, attitudes and behaviours, available medical care services, and health expenditure per capita on healthcare outcomes. Spinks and Hollingsworth (2009) examined the impact of socioeconomic determinants (such as unemployment rate, education attainment, GDP per capita). Schwellnus (2009) and Economou et al. (2009) used a combination of socioeconomic determinants and population lifestyles. Only few studies, e.g. Bhat (2005) and Afonso et al. (2005), included the number of inpatient beds and levels of health employment as inputs rather than health expenditure. Hadad et al. (2013) divided the inputs into two categories to distinguish the indicators with high healthcare system’s control (physicians’ density, inpatient beds) from those with low healthcare system’s control (GDP per capita, health expenditure per capita, fruit and vegetables intake).

In most studies the healthcare outcomes were measured by life expectancy at birth. Just Hadad at al. (2013) used two outputs: life expectancy at birth and infant survival rate. We shall follow this approach.
2. METHODOLOGY

We apply DEA to analyse the efficiency of healthcare systems in 27 European countries for which the data is available of the year 2011. The countries are considered to be decision making units. This approach allows us to consider several indicators of different nature as the inputs and outputs of the healthcare systems and rank the countries by the relative efficiency of their healthcare systems.

DEA is a nonparametric method of measuring a relative efficiency of decision making units (DMU) based on linear programming. Using DEA we have no need to explicitly specify a mathematical form for the production function. Since we are capable of handling multiple inputs and outputs measured in different units, we can uncover relationships that remain hidden for other methodologies. The DEA results do not only distinguish efficient and inefficient DMUs and rank the DMUs by their efficiency scores, but also identify and quantify the sources of inefficiency for any evaluated DMU.

Since healthcare system desires both to maximize health gains and minimize inputs, we have chosen a non-oriented model. Due to significant differences in size, population and the level of economic development between individual countries we assume variable returns to scale (VRTS) for their healthcare systems.

For our purpose we utilize a non-radial and non-oriented Super-SBM DEA model. SBM was developed by Tone (2001) and allows us to determine non-radial (non-proportional) input excesses and output shortfalls (generally called slacks) for all compared DMUs. Based on the slacks, a unique efficiency score for each DMU is calculated to identify efficient and inefficient systems. Efficient systems are assigned the unit efficiency scores, while inefficient systems are assigned efficiency scores less than one. In order to distinguish and rank the efficient healthcare systems among themselves, we apply so-called super-efficiency. The super-efficiency method for radial models was developed by Andersen and Petersen (1993) to rank the efficient DMUs. This approach allows the efficient DMUs to receive an efficiency score greater than one. Tone (2002) introduced non-radial super-efficiency models using the slack based measure (Super-SBM).

In order to study the impact of healthcare expenditure to the healthcare system efficiency we apply two alternative DEA models. In Model I we consider health expenditure per capita while in Model II we take into account health expenditure as a percentage of GDP. Then we compare the efficiencies calculated by the two models. Figure 1 shows the details of applied DEA models.

Figure 1. Applied DEA models

Note that all inputs and outputs, with the exception of life expectancy, are ratio variables. But using ratios in standard DEA models may lead to incorrect results since they do not comply with the convexity axiom which is one of the main underlying assumptions of the production possibility set in DEA (see Emrouznejad and Amin (2009) for details). In order to solve this problem, we may consider both the numerator and denominator of any ratio indicator as separate variables and use them accordingly as inputs and outputs replacing the original ratios in the models. However, in Section 3 we present the values of original ratio variables since they provide a more illustrative comparison of the countries.

The data is analysed using DEA-Solver software (www.saitech-inc.com).
3. DATA AND VARIABLES

We compare relative efficiency of healthcare systems in 27 European countries, namely Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Estonia, Finland, France, Germany, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Norway, Poland, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, and United Kingdom. These countries are considered to be DMUs for DEA.

Data has been collected from two sources: the Eurostat Statistics Database and the OECD Health Data. Two outputs were chosen to represent healthcare outcomes – life expectancy at birth of males and infant mortality rate (transformed to correspond with the DEA assumptions as follows). The DEA technique requires outputs to be measured in such a way that “more is better”. Since infant mortality rate (IMR) does not meet this rationale, we calculate the modified infant mortality rate (MIMR) by the formula $MIMR = 1000/IMR$ that corresponds to the number of live births over the number of deaths of infants under 1 year of age. The inputs included in our analysis depends on the chosen model. The number of practising physicians per 100,000 inhabitants and the number of hospital beds per 100,000 inhabitants are included in both models. The total health expenditure per capita is included in Model I and the share of total health expenditure in relation to GDP is included in Model II. Since data on practising physicians and hospital beds in some countries is not available for year 2011, we estimate the missing values based on these in previous years.

Definitions of selected variables used in the analysis and data sources are given in Table 1.

Table 1. Variables and data sources

<table>
<thead>
<tr>
<th>Variable</th>
<th>Definition</th>
<th>Data source</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP per capita</td>
<td>Gross domestic product per capita (current US$)</td>
<td>OECD, 2013</td>
</tr>
<tr>
<td>Practising physicians</td>
<td>Total number of practising physicians (medical doctors) per 100,000 inhabitants (Practising physicians provide services directly to patients.)</td>
<td>Eurostat, 2014</td>
</tr>
<tr>
<td>Hospital beds</td>
<td>Total number of hospital beds per 100,000 inhabitants</td>
<td>Eurostat, 2014</td>
</tr>
<tr>
<td>Health expenditure</td>
<td>Total health expenditure per capita (current US$)</td>
<td>OECD, 2013</td>
</tr>
<tr>
<td>Share of GDP</td>
<td>Share of total health expenditure in relation to GDP (%)</td>
<td>OECD, 2013</td>
</tr>
<tr>
<td>Modified infant mortality</td>
<td>Number of live births over the number of deaths of infants under 1 year of age</td>
<td>Eurostat, 2014</td>
</tr>
<tr>
<td>Life expectancy</td>
<td>Life expectancy at birth – males (years)</td>
<td>Eurostat, 2014</td>
</tr>
</tbody>
</table>

Source: The Authors

We show source data for individual variables in the following charts. All data is of the year 2011.
For illustration’s sake, we divide the selected countries into four categories based on GDP per capita (Figure 2). Three countries with the highest GDP are assigned red colour, the other countries with GDP greater than 25 000 US$ are assigned green, the countries with GDP between 10 000 and 25 000 US$ are assigned yellow and two countries with the lowest GDP are blue. Note that the former two categories include countries of Western Europe while the latter two categories cover transforming countries of Central and Eastern Europe.

**Figure 2.** GDP per capita (current US$)

![Graph showing GDP per capita of selected countries](source: OECD (2013), processed by the Authors)

In Figure 3 we see that there is a close connection between GDP per capita and Health expenditure per capita. But there are greater differences between countries. Health expenditure per capita in Norway is nearly 20 times higher than in Romania. This naturally reflects the different pricing levels in the countries.

**Figure 3.** Health expenditure per capita (current US$)

![Graph showing Health expenditure per capita of selected countries](source: Eurostat (2014), processed by the Authors)
If we take health expenditure as a percentage of GDP (Figure 4) instead of health expenditure per capita, the ranking of countries significantly change. But the distance between the top and the bottom values in this ranking is not so great: France has just a twice higher share of GDP than Romania.

**Figure 4.** Health expenditure share of GDP (%)

![Graph showing health expenditure share of GDP for various countries.](Source: Eurostat (2014), processed by the Authors)

In Figure 5 the number of practising physicians per 100 000 inhabitants is shown. Austria reports the highest number of practising physicians while Poland and Romania have the lowest numbers.

**Figure 5.** Practising physicians per 100 000 inhabitants

![Graph showing practising physicians per 100 000 inhabitants for various countries.](Source: Eurostat (2014), processed by the Authors)
Figure 6 depicts the number of hospital beds per 100,000 inhabitants. Germany and Austria report the highest numbers of hospital beds while Ireland, UK, and Sweden have the lowest numbers. No significant correlation between the number of practising physicians or hospital beds and the economic performance of the countries can be observed.

**Figure 6.** Hospital beds per 100,000 inhabitants

While the previous charts showed the resources used by healthcare systems, the following two charts present the indicators of health condition of the population.

Figure 7 displays the life expectancy at birth of males. The best situation is in Iceland and Switzerland, the worst in Lithuania and Latvia.

**Figure 7.** Life expectancy at birth – males
Figure 8 shows that the best infant mortality rate is reached by Iceland and northern countries, while far the worst situation is in Bulgaria and Romania.

**Figure 8.** Infant mortality rate

![Figure 8: Infant mortality rate](image)

Source: Eurostat (2014), processed by the Authors

Basic statistical characteristics of the variables are given in Table 2.

**Table 2.** Descriptive statistics of the variables (year 2011)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Minimum</th>
<th>Country</th>
<th>Value</th>
<th>Maximum</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP per capita</td>
<td>37032.93</td>
<td>7286.39</td>
<td>Bulgaria</td>
<td>111913.18</td>
<td>Luxembourg</td>
<td></td>
</tr>
<tr>
<td>Practising physicians</td>
<td>329.68</td>
<td>218.60</td>
<td>Poland</td>
<td>482.40</td>
<td>Austria</td>
<td></td>
</tr>
<tr>
<td>Hospital beds</td>
<td>526.51</td>
<td>270.60</td>
<td>Sweden</td>
<td>822.20</td>
<td>Germany</td>
<td></td>
</tr>
<tr>
<td>Health expenditure per capita</td>
<td>3384.82</td>
<td>479.65</td>
<td>Romania</td>
<td>9908.21</td>
<td>Norway</td>
<td></td>
</tr>
<tr>
<td>Share of GDP</td>
<td>8.53</td>
<td>5.61</td>
<td>Romania</td>
<td>11.63</td>
<td>France</td>
<td></td>
</tr>
<tr>
<td>Infant mortality rate</td>
<td>4.07</td>
<td>0.90</td>
<td>Iceland</td>
<td>9.40</td>
<td>Romania</td>
<td></td>
</tr>
<tr>
<td>Life expectancy (males)</td>
<td>76.13</td>
<td>68.10</td>
<td>Lithuania</td>
<td>80.70</td>
<td>Iceland</td>
<td></td>
</tr>
</tbody>
</table>

Source: The Authors

As already mentioned in Section 2, we should avoid using ratio indicators in DEA models. To do so, their numerators and denominators will be used as separate inputs and outputs. Thus, the total numbers of practising physicians, hospital beds, and the death of infants under one year of age, as well as the total amount of health expenditure will be used as inputs in both Model I and Model II. On the other hand, the total population of the country and the total number of live births along with life expectancy at birth for males will be used as outputs in both models. Besides that, the total GDP of the country will be considered as an additional output in Model II. It means that both models use the same four inputs and the same three outputs, and the only difference between them consists in the fact that Model II takes into account GDP while Model I does not. These sets of inputs and outputs correspond to the ratio inputs and outputs indicated in Figure 1.
4. RESULTS AND DISCUSSION

The results of the analysis are summarized in Figure 9. The left and right tables show the efficiency scores of countries resulted from Model I and Model II, respectively. The countries in the tables are ranked by their efficiency scores.

Efficient countries are assigned scores of at least one, the countries with lower scores are considered inefficient. The high numbers of efficient countries in both models are caused by the fact that we use a relatively high total number of inputs and outputs in relation to the total number of evaluated countries. Nevertheless, super-efficiency scores allow us to distinguish and rank the efficient countries among themselves.

Iceland appears to have the most efficient healthcare system in both models, due to the best output values. On the other hand, healthcare system in Austria seems to be the least efficient. It reaches the outputs above average, but using large resources.

Figure 9. Comparison of efficiency scores for Model I and Model II (with ratio data)

<table>
<thead>
<tr>
<th>Efficient countries</th>
<th>Model I Score</th>
<th>Efficient countries</th>
<th>Model II Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iceland</td>
<td>2.72</td>
<td>Iceland</td>
<td>2.71</td>
</tr>
<tr>
<td>Estonia</td>
<td>1.30</td>
<td>United Kingdom</td>
<td>1.30</td>
</tr>
<tr>
<td>Poland</td>
<td>1.30</td>
<td>Estonia</td>
<td>1.27</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>1.26</td>
<td>Poland</td>
<td>1.24</td>
</tr>
<tr>
<td>Romania</td>
<td>1.18</td>
<td>Luxembourg</td>
<td>1.20</td>
</tr>
<tr>
<td>Malta</td>
<td>1.17</td>
<td>Romania</td>
<td>1.18</td>
</tr>
<tr>
<td>Sweden</td>
<td>1.13</td>
<td>Malta</td>
<td>1.17</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>1.12</td>
<td>Germany</td>
<td>1.15</td>
</tr>
<tr>
<td>Ireland</td>
<td>1.09</td>
<td>Czech Republic</td>
<td>1.13</td>
</tr>
<tr>
<td>Germany</td>
<td>1.08</td>
<td>Italy</td>
<td>1.12</td>
</tr>
<tr>
<td>Italy</td>
<td>1.08</td>
<td>Sweden</td>
<td>1.11</td>
</tr>
<tr>
<td>Cyprus</td>
<td>1.07</td>
<td>Norway</td>
<td>1.11</td>
</tr>
<tr>
<td>Spain</td>
<td>1.07</td>
<td>Finland</td>
<td>1.09</td>
</tr>
<tr>
<td>Finland</td>
<td>1.06</td>
<td>Germany</td>
<td>1.07</td>
</tr>
<tr>
<td>Slovenia</td>
<td>1.05</td>
<td>France</td>
<td>1.05</td>
</tr>
<tr>
<td>France</td>
<td>1.05</td>
<td>Spain</td>
<td>1.06</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>1.02</td>
<td>Slovenia</td>
<td>1.04</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>1.01</td>
<td>Switzerland</td>
<td>1.02</td>
</tr>
<tr>
<td>Croatia</td>
<td>1.01</td>
<td>Bulgaria</td>
<td>1.01</td>
</tr>
<tr>
<td>Slovakia</td>
<td>0.88</td>
<td>Croatia</td>
<td>1.00</td>
</tr>
<tr>
<td>Hungary</td>
<td>0.86</td>
<td>Belgium</td>
<td>0.94</td>
</tr>
<tr>
<td>Latvia</td>
<td>0.86</td>
<td>Slovakia</td>
<td>0.87</td>
</tr>
<tr>
<td>Belgium</td>
<td>0.85</td>
<td>Latvia</td>
<td>0.86</td>
</tr>
<tr>
<td>Norway</td>
<td>0.83</td>
<td>Belgium</td>
<td>0.94</td>
</tr>
<tr>
<td>Lithuania</td>
<td>0.81</td>
<td>Slovakia</td>
<td>0.87</td>
</tr>
<tr>
<td>Switzerland</td>
<td>0.70</td>
<td>Latvia</td>
<td>0.86</td>
</tr>
<tr>
<td>Austria</td>
<td>0.64</td>
<td>Hungary</td>
<td>0.86</td>
</tr>
</tbody>
</table>

We observe a strong correlation between the results of Model I and Model II, both in the efficiency scores (Pearson coefficient = 0.97) and in the ranking (Spearman coefficient = 0.86). However, a more detailed view reveals that the countries with the highest GDP and health expenditure per capita (red category) significantly improve their positions in score and ranking if we take into account the health expenditure as a share of GDP. As for Norway and Switzerland, the change is even qualitative. Regardless of their healthcare outputs which are significantly better than the average, they are considered inefficient in Model I. On the contrary, they become efficient in Model II.

The impact of the healthcare expenditure can be nicely illustrated by the example of Luxembourg and Croatia. The share of GDP is about the same in both countries, but health expenditure per capita in Luxembourg is nearly 8 times higher than in Croatia (see Figure 4 and 3, respectively). By Model I the two countries reach nearly the same efficiency scores, but the Model II score for Luxembourg is by 20% better.

The case of Romania illustrates the weak point of DEA efficiency evaluation in the context of healthcare systems. Countries with low level of inputs and low level of outputs may be considered efficient too. However, they can hardly be referential for inefficient countries.
5. CONCLUSION

We analysed the efficiency of healthcare systems in selected European countries (using two alternative Super-SBM DEA models). We considered the number of practising physicians per 100 000 inhabitants, the number of hospital beds per 100 000 inhabitants, and the total health expenditure per capita (or alternatively total health expenditure as a share of GDP) as DEA inputs, and modified infant mortality with life expectancy of males as DEA outputs. This approach allowed us to study the impact of healthcare expenditure on the efficiency scores with respect to the performance of national economies.

As a result, we identified efficient and inefficient countries and ranked them by their efficiency scores. Although the scores and rankings obtained from the two alternative models are strongly correlated, the positions of countries with the highest GDP per capita are significantly different. In spite of good values in desirable healthcare outcomes, they appear inefficient if we include the healthcare expenditure per capita into the analysis. Thus we conclude that using the healthcare expenditure share of the country’s GDP may be better to assess the efficiency of national healthcare systems.

ACKNOWLEDGEMENT

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APPENDIX: THE DEA METHODOLOGY

Consider \( n \) DMUs, (countries in our case) where each DMU \( j (j = 1, \ldots, n) \) uses \( m \) inputs \( x = (x_1, \ldots, x_m) \) to produce \( q \) outputs \( y = (y_1, \ldots, y_q) \). According to Cooper et al. (2007) the non-radial super-efficiency score under variable returns-to-scale is calculated by the following fractional program:

\[
\delta^* = \min \delta = \min \left\{ \frac{1}{\lambda_i^*} \sum_{i=1}^{m} x_i / x_{i0} \right\}
\]

subject to

\[
\sum_{j=1}^{n} \lambda_j x_j \geq x,
\]

\[
\sum_{j=1}^{n} \lambda_j y_j \leq y,
\]

\[
x \geq x_0, y \geq y_0,
\]

\[
\sum_{j=1}^{n} \lambda_j = 1,
\]

\[
y \geq 0, \lambda \geq 0.
\]

Where \( x = (x_1, \ldots, x_m) \) and \( y = (y_1, \ldots, y_q) \) are respectively input and output matrices of observed data, \( x_i = x_{i0} - s_i^- \) and \( y_j = y_{j0} + s_j^+ \) are the recommended projections and the vectors \( s^+ \in \mathbb{R}^q \) and \( s^- \in \mathbb{R}^m \) denote output and input slacks.
LITERATURE


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ISSUES OF CROATIAN TOURISTIC IDENTITY IN MODERN TOURISTIC TRENDS
LANA MARINKOVIĆ

ABSTRACT
Contemporary worldwide processes have brought many significant changes into all economic and social spheres on a global scale. Informational and science progress helped to create efficient and swift communicational channels so one can reach all the necessary information at the same moment one asked for them. So, due to globalization the world is virtually getting smaller and more accessible. Tourism as a phenomenon has been greatly affected and therefore encouraged by this accessibility, since now all destinations can equally compete on this broad tourist market. To be able to distinct one destination or tourist attraction from another, one should have a firmly and clearly defined touristic identity which is nowadays almost a prerequisite for a land or a region to draw new guests. Local, regional or even national touristic identities include their historical and geographical features, cultural heritage, language, beliefs and traditions created for centuries, which are mostly valued through cultural tourism. A story put together like this makes a local brand, which could potentially not only boost the tourism flow, but also help to define and strengthen the overall national identity. This is an utmost important process that Croatian identity needs to go through, since its identity has still not been defined due to the past historical and political circumstances, and tourism is currently the most propulsive economic branch in Croatia, if not the only one. This paper will show the present vague state of Croatian touristic identity, then question various solutions it will have to undertake and finally suggest the means and strategies necessary to avoid unplanned exploitation and drowning in the global tourist market.

KEY WORDS: Croatian touristic identity, cultural heritage, cultural tourism, identity, regional development.

1. INTRODUCTION
What is the picture of Croatian tourism today? What is it that our country has to offer and how can it cope with its competitors in the tourism market? Is Croatia the country that is only known for its 3S effect (sun, sea and sand), or can it offer something more? Would that be the culture and history, untouched nature or perhaps interesting events? Similar questions are asked by the experts of various profiles in the tourism industry as well as tourism professionals in the field. These themes are discussed in the media, economic forums, as well as in the process of planning tourism strategies. Uniformed answer does not exist. The spectrum of possibilities is wide and the only question is defining the ultimate goal: what kind of a tourist destination do we want to be, what do we want to offer, and in the end, what do we want to gain from tourism. The path to this goal will then be much easier to find. Tourism in Croatia is a very important and almost the only stable economic branch at this moment (in terms of cyclic constants every year). Therefore, it can be expected that it remains this way unless it comes to some unforeseen circumstances. Planning in tourism will, therefore, largely mark the present and the future generation because they will have to determine the desired look and the reputation of the country in the tourism world. Future employments in the tourism industry, price policy, demographic structure of tourist destinations and tourism education system personnel will depend on this kind of planning. Thus, the author’s attitude towards the question of defining the position of Croatia on the European tourist map, and even the world map, is extremely important in the current political and economic moment, and thereby provides an excellent starting point for resolving many other unresolved issues that are lagging behind since the 1990’s.

The main questions refer to the issues of identity: who are we, what are we, who do we want to be and how do we want to represent ourselves to the others. The concept of identity can be divided into several segments from cultural, historical and regional to an overall national, which is not only the sum of these few „lower-level” identities, but part of a much bigger picture. The discussion in this paper will retain mostly around the theme of cultural touristic identity, which is very important formative factor of a national identity. The aim is to highlight the ambiguity and slowness in thinking and taking a stand about the identity system, which is a vital process for a young country such as Croatia.

The concept of identity has been more actively researched in the professional and scientific papers by the end of the 1990’s and especially since the beginning of the new millennium. Terms such as branding in tourism start to appear, thus giving completely new roles to the well-known economic terms. The topic of identity has also been researched by B. Škoko who speaks of the country as a brand. Recent titles of the author D. A. Jelinčić speak about the meaning of the cultural heritage in the formation of identity and of identity management. The trilogy of M. Castells also speaks about the identity power, especially in the globalization and the new information age in general. S. Anholt is one of the leading
scholars and experts in the field who analyzes the path that needs to be taken towards the competitive identity in the world, especially in terms of national identity.

The topic of identity reflection is actually fairly new in the Croatian professional circles and in practice it stills largely lags behind the theory, which is fairly minimal in Croatia. The aim of this paper is to once more point out the necessity of dealing with the concept of identity, cultural identity and identity in tourism because in today’s globalized world only a recognizable story can find its way to the end customer and it is a story with a unique name and picture – a story with an identity.

2. ESTABLISHING IDENTITY IN MODERN TOURISM

2.1. Defining identity

The term identity is defined by Castells (2002.) as a process of creating the meaning on the basis of a cultural attribute, or related set of cultural attributes that are given a priority over other sources of meaning. Many different identities that reflect through the performance of different social roles may exist for an individual or collective actors. The emphasis is placed on the process of self-built and individuation. Thus, each individual will first build itself, and then participate in the construction of the collective identity. One can consider the issue of social, cultural or general national identity in the same way. It is necessary to define and build the desired identities, e.g. cultural or tourism, and they would all be a part of a larger gender concept – national identity. However, it should be noted that the general identity is not just the sum of the individual elements of an identity but much more than that. The fundamental determinant of an identity and meaning is precisely this sense of belonging to a group or area, and differentiating yourself from everyone else; a sense of uniqueness, to be exact.

The identity of a country, region or nation should be built on oneself, or knowing oneself, including all the distinctive elements that make the group or an area. It is often in the past that own identity was defined according to others. For example, “we” as opposed to „them“ (“we are not like them”, etc.), or defining ourselves by negation of another. These distinctive features of identity are mainly related to the historical and geographical characteristics and developments and the language, culture, religion, customs, etc., that derived from them, which means that the main links of an identity are found in the sphere of a cultural identity. The cultural identity is therefore a basis for building a common national identity and it can be stated that, in case of Croatia, this foundation is very weak. The question is whether we know what and how we would present the competitive advantage of our country, but more about this topic in the text below. However, it is the cultural diversity as a notion that has been mentioned in the last decade in all important documents of the European Union, UNESCO and other international organizations that are becoming more aware of the potential loss of identity in today’s globalized world. This resulted in the development of cultural awareness diversity of a nation as a wealth, thus seeking to encourage the preservation and restoration of our identity and respect for the identity of the “others”. The same tendency runs through the levels of national identity as well as associated cultural touristic identity. Touristic identity can be defined as a complete and comprehensive presentation of a certain tourist destination or country in order to create its visibility in the market, i.e. highlighting the differences in relation to other destinations or countries.

Identity is an image that we create about ourselves and it should represent who we are or what we want to be. It is a different thing how this picture is perceived by our neighbors, guests or tourists – this is a question of image. Image is therefore an experience, impression, perception in a head of someone about what we have presented. Its creation is influenced by a number of factors, such as previous experiences, which of course can be subjective, reviews, personal opinions, news, other people’s experiences, etc., which accumulate over the years and create a specific image that is very difficult to change, especially if there is no systematic effort to do so. For example, a poor image of a country can become a considerable barrier when it comes to attracting new guests, considering that in today’s information age the information travels the world with an astonishing speed and in such quantities that a person is literally buried with data. Therefore, they resonate on the basis of few selected ones that they weigh according to their own internal value system. By knowing this we can conclude that in the absence of a defined identity, the probability of matching the identity and image is very low, which means that the image and impression of a country develops spontaneously and it is never the right long-term solution.
2.2. Tourism, cultural tourism and globalization

Tourism is a very dynamic phenomenon. Goals are constantly changing, new destinations and travel motives are created, and because of the major changes, new destinations and travel motives are created, and because of this major changes are already visible within one decade. This entire process has been enhanced by globalization that has opened up the world more and more towards new forms of unification and convergence, starting with the creation of a common market for goods and capital all the way to the connection of the world through the information and communication technology. Technology has played a key role in the economic progress over the past 30 years since the exchange of knowledge has become much faster and more efficient than ever before. People are able to receive all kinds of data with just a few clicks. However, at the same time, it has become almost impossible to process so much information and distinguish which one is important for us. This has actually created an opportunity for everybody to present themselves in the tourism market. The attitude of a potential tourist about a destination does not necessarily depend on someone else’s experience or a documentary that was seen somewhere by accident. Targeted marketing and representing the country in a way that is desired can be used as well, thus creating a positive image within the targeted clientele. Although it is not difficult to reach a customer in this day and age, it has become very challenging to attract and encourage them to choose exactly what we want when there are various options offered to them. This is exactly where the power of identity lies. The identity “sells” a product. It gives it a framework and a signature. This is why it is important to create a single recognizable image that will stay in the guests’ memory and prompt them to see themselves in that picture. In this poetic way we can present simplicity and the comprehensiveness of the identity concept and how well constructed identity can contribute to the development of tourism, and consequently a better image of a country.

Globalization, as noted before, can affect the development process in both directions — positive or negative. The main advantage is that an open market and the information are now available to almost everybody and there is space for everyone. The unknown ones can compete equally with the celebrities and the new ones can quickly introduce themselves to a wider audience. The same is applied to new tourism destinations, new forms of tourism offers, other countries and regions that have not yet participated in the tourism market or those who want to change their target group, or engage in another segment of tourism. However, the negative side of globalization has the potential that even the negative feedback can very quickly reach potential customers. One of the main objections to the globalization processes in culture and tourism is their impact on the gradual merging and even disappearance of some cultural specificity, all the way to the loss and deletion of identity. This gradually occurs especially in smaller communities. An area sometimes tries to be as close as possible to another already known area and it tries to “sell” itself, which creates commercialization of culture. They borrow or even invent elements from other identities and pose them as their own because they believe this will create a way in which the local culture will be easily recognized. The fact is that the area does not even know what their specific features are, or, more likely, there are not enough local people and professionals who care about the preservation of identity. This is the easiest way to suppress local identity, which is the most vulnerable one. The culture was once successfully transmitted and built for centuries from one generation to another, and in this day and age when this transfer should be considerably easier it is in a great danger to fade or even disappear in some places.

Cultural tourism is based on the evaluation of the importance of cultural heritage, both tangible and intangible. Thus, the heritage can be converted into an extremely fruitful economic good if it is properly managed. The term heritage tourism is often used in literature as a synonym for cultural tourism since many definitions of both terms completely overlap. Perhaps it would be more accurate to say that the heritage tourism is still a subgroup of cultural tourism, given that it includes many other categories of cultural resources (Jelinčić, 2010). In addition to natural resources, cultural heritage tourism is the most valuable resource because it provides an insight into what makes a country, region and its people indigenous. And this is what the world travelers today are increasingly looking for. We just need to direct them where they can find what interests them. In addition, heritage tourism has a very positive and wide economic and social impact because it helps to preserve the cultural heritage for the future, helps renew tourism, and most importantly for this topic, builds and emphasizes identity. One of the most important international institutions that deals with the protection and revitalization of cultural heritage is definitely UNESCO. Numerous projects that arose from the collaboration with UNESCO have shown how to successfully restore and preserve the heritage of the locality for the presentation in tourism, taking into account the principles of cultural tourism and other factors relevant to the local community and the quality of the tourism offer. Adequate presentation and interpretation of heritage are most important when it comes to cultural tourism. Those two terms describe the key distinction of this form of tourism from all others. All experts would agree that every monument or city remains a bare rock if it has not been given life, or in other words, it is necessary to animate, tell a story, explain, convey to a guest in an understanding way. Heritage seeks a mediator or a guide, an animator that will animate history into something tangible and impressive, but not fake. This interpretation needs to be focused on original, authentic presentation of heritage and tradition without borrowing, inventing and modernizing in order to really ensure a high quality tourist offer because this is exactly what makes it different from all others (Jelinčić, 2006). This is the way to create a tourism identity of a certain destination or an entire country.
Although there is plenty of heritage and culture in Croatia, sometimes unfortunately the most valuable ones are in the hands of local organizations and several individuals who either do not have enough power or have the wrong interests when it comes to the management of local heritage. This can irreversibly damage the unique treasure that the country has at its disposal and, in the long run, reduce the resource base for tourism development, rather than take an advantage of modern life and have a positive influence on all the elements of touristic identity. Global processes can no longer be stopped, which means that it is finally time to learn how to take an advantage of the promotion of our own country.

2.3. Modern tourist’s motives and demands

Travel motives have repeatedly changed since the very beginning of the development of tourism. The main trend and motivation to travel used to be spending winter holiday in the warm sea areas but this trend changed after the World War II to predominantly summer tourism. The mass tourism phenomenon has automatically joined summer holiday concept and in many cases it did not bring anything positive to certain destinations and has only emphasized seasonality in tourism. This is why the last twenty or thirty years have been viewed as a positive shift in thinking as this mass character concept has slowly been left behind and the turn was made towards the sustainable forms of tourism directed toward a different clientele and different interests. Specific or selective forms of tourism are developed that are not so dependent on the season (specifically the “sun and sea” package) and are trying to attract guests of different affinities. Among the many in Croatia we can distinguish the cultural, congressional, rural, health, hunting and eco-tourism as industry branches in which lies huge potential or have just recently started an intensive cooperation with the tourism sector but already look promising.

However, the guests all over the world who want to unwind and relax during their holiday also show interest towards the culture and cultural heritage. This always comes up as a secondary motive that prevails if the guests are deciding between multiple destinations or serves as an additional offer in order to possibly extend guests’ stay at a certain destination (Jelinčić 2009). Today’s tourists seek not only a place on the beach and nice weather but also a new experience. They wants to get to know the local culture and local residents, try local specialties, feel the original atmosphere and such new experiences are “packaged” to be taken home with them. This is what they will remember, what they will tell their friends about and what will in the end encourage people to create their own individual impression, either positive or negative. If this “package” is carefully prepared then there is no reason for a customer to remain dissatisfied after his

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1 Elements of natural and cultural heritage in Croatia are also on the list of heritage protected by UNESCO. There are two natural heritage entries: Plitvice Lakes National Park and Stari Grad Plain on the island of Hvar. There are 5 cultural heritage entries: the town of Dubrovnik, Diocletian’s Palace in Split, historical core of Trogir, St. Jakov Cathedral in Sibenik and Euphrasian Basilica in Poreč.

2 List of the intangible cultural heritage is kept since 2003 whereby the Croatian list of protected intangible assets in the period 2009 – 2013 has recorded as many as 13 entries, thus becoming the longest list in Europe and the third longest in the world. The list includes: Lacemaking (Pag, Hvar, Lepoglava); Two-part singing and playing in the Istrian scale; Festivity of Saint Blaise – Dubrovnik; Spring procession of Ljelje/queen from Gorjani; Annual carnival bell ringers’ pageant from the Kastav area; Procession Za Krizen (follow the cross) on the island of Hvar; Traditional manufacturing of children’s wooden toys in Hrvatsko Zagorje; Sinjska Alka - a knight’s tournament in Sinj; Gingerbread craft Licitar from Northern Croatia; Ojkanje – two part singing listed for urgent protection; Bećarac – singing and playing from Slavonia, Baranja and Srijem; Nijemo kolo - silent circle dance of the Dalmatinska zagora; Klapa multipart singing; Mediterranean diet on the Croatian Adriatic, its coast and parts of the hinterland.
trip. Since this is precisely the “package” that can be influenced, the cultural heritage has a great potential to become a part of a main offer at a destination and not remain just a secondary option. This is where strategic planning, targeted marketing and all travel experts need act along with the local residents in a joint effort to present the cultural heritage as a key element of the Croatian tourism offer. As previously mentioned, the cultural resources are abound, and are indeed still very much in demand. It should not be forgotten that the offer in cultural tourism is oriented towards the educated guests with specific and selected interests, so proper segmentation and defining target groups for specific cultural offer are very important steps. The cultural tourism in Croatia could play both roles for quality tourism offers: in coastal destinations as an addition to holiday tourism with new content and extended stay, and in continental destinations as a base for the development of selective forms of tourism and the creation of an authentic tourism product and thus, the local identity.

The relevance of cultural aspect is confirmed in the research done by TOMAS Institute of Tourism in 2008. In fact, as it can be seen from the attached picture, vacation is definitely the most important motive when selecting a trip, but immediately following motive is visiting cultural attractions and exploring local culture of the country where you are travelling. The share of tourists who travel only to visit cultural heritage or cultural events in Croatia is about 26 percent, which is very close to the European level of 25 percent. We can especially distinguish the difference between visits to cultural attractions on the coast and inland areas – while this is the reason to travel in continental parts for almost 41 percent of tourists, this share is only 15 percent when it comes to the coast, which confirms the basic reason for the arrival of tourists to our shores, and this is a vacation in the sun and sea.

Picture 2. Tourist motives for going on a vacation

Of the many aspects of heritage management in tourism industry one that is often pointed out is the one that gives the visible results first, and it is an economic one. It seems like we could thank the tourism on the promotion of the contemporary scientific discipline of economic architectural heritage or economics of cultural and civilization heritage (Geić, 2002). Specifically, at the time of tourist valorization the cultural heritage becomes economic factor that brings revenue, and alongside the spiritual and heredity treasure it gets the attribute of economic valuable from the perspective of local and national economy.

2.4. Status and perception of Croatian cultural touristic identity

The Ministry of Tourism has issued a new tourism development strategy until year 2020, in which they highlight new goals and objectives for the tourism development in the following timeframe. The following vision could be extracted regarding the topic of touristic identity: “In year 2020 Croatia is a globally recognized tourist destination, competitive and attractive for investments, which creates jobs and manages a development of its entire area in a sustainable way while fostering a culture of quality, security and unique variety of authentic content and experiences for the guests throughout the year.” Abovementioned vision is enhanced by current guidelines of the strategic marketing plan for tourism until 2020 (as well as the convictions of the current Minister of Tourism), whose goals are clearly defined: strengthen the Croatian brand, thus extending the tourist season and increasing revenue, which requires one original story, one creative solution that will tell the story of Croatia – and once again, it comes to the key theme of identity. This development vision might sound a little idealistic, however, it is a pinnacle of achievement in the development of quality
tourism, or something that all experts and tourism professionals should aspire to. The goal is simple, however, the path to the realization is neither short nor simple. Let's examine why!

The conversations and interviews conducted on the topic of perception of Croatian cultural touristic identity as well as the initial results of the survey carried out on the subject of the doctoral thesis research of the author, have led to many interesting, though partially expected results. The requirement was to find the views and opinions of local people who are engaged in at least some form of tourism, or are in contact with tourists and visitors. Therefore, the interviewees who participated are employees in different branches such as travel organizers, informants at tourist info centers, tourist guides – people who are directly involved in the closest contact with tourists and are expected to be experts in knowing their country as well as the issues of tourism. The questions were focused on their personal impressions and perceptions; therefore, the method of choice for conducting this research was interview. After performing the comparison and analysis of the responses, attitudes and opinions, it is possible to draw the following main points:

• What are the characteristics of Croatian cultural tourism identity, or in other words, what makes this identity?

Since this question has caused a brief confusion it is necessary to first “translate” the question. When it was explained that we are seeking special features for which Croatia would be recognizable to tourists, all subjects immediately concluded that “there is a lot”. Specifically, they found that they could enumerate many elements that make Croatia special, but it is hard to single out only five or six. Indeed, the majority presented different elements, but only a few found themselves on the same list. Those are: Dubrovnik, Plitvice Lakes, clear water, untouched nature and rich history.

• What do you personally think is the greatest potential for Croatian tourism?

Clear sea, sun and beaches were, of course, singled out as the primary resources, but there is also a great potential in rural tourism in terms of rural villas and family farm residences. This is followed by the health tourism, which is a relatively new segment of the Croatian market but is nonetheless, recognized by the tourist experts, as well as the stronger involvement of culture and mandatory cultural events in cultural tourism. In addition to the summer beach tourism, it is believed that the time has arrived when it is necessary to start developing all the possibilities of continental tourism as well.

• What is the best feedback we receive from guests, and what is the strongest criticism? What are the guest mostly surprised by when they visit Croatia?

These questions give an insight into Croatia’s image because the answers are obtained directly from the guests who came to Croatia and already have a previously acquired idea of our country. What needs to be highlighted from their positive reactions is the noteworthy cleanliness, hospitality, spirit and charm of some of the historical sites, as well as the vibrant urban areas of crowded terraces, which stimulates the guests to be part of such an atmosphere. What we have drawn from the negative comments is the statement that there is not always adequate entertainment, aside from just bars. Another impression is that that cultural facilities such as some museums are not available every day. Elderly guests are displeased with often-overcrowded tourist destinations (mostly seasonal), which makes everything seem like it is on an assembly line, leading to an overall impression that the tourism workers are losing an interest in an individual approach to each guest. As some of the biggest surprises the tourists have emphasized the cleanliness of streets and beaches, the organization of work, the knowledge of foreign languages and the lack of it, but on a general level many guests have stated that they could not have expected so much, meaning, they could not have imagined all that waited for them once they arrived (mainly in the positive sense).

• Has enough been done in order to advance tourism?

The general consensus is that the work has been slow and often insufficient. The options of using the EU projects and funds have been pointed out as a possibility to improve certain aspects of tourism. The main objection is that the tourism is mainly happening by itself because every year the season arrives and the tourists are suddenly here. The interviewees are familiar with the key strategic documents, although not in detail, but they are very suspicious about the realization of the set goals, since they criticize the dependence of all elements on the political developments in the country.

The author is herself a licensed tour guide as well as the associate to the Croatian National Tourist Board with extensive work experience in tourism sector, therefore is possible to have a broad overview of the structure of employees who most directly present our country to visitors.
• What needs to be done in order to achieve better tourism traffic and offer?

According to the opinions of the interviewees, greater power of governing should be given to tourist offices on lower levels (city and county), then activate the power of continental tourism in order to develop the interior of the country while at the same time taking the advantage of EU funds. Following that should be the inclusion of more domestic agricultural products (which would lead to the development of the rural region as well as the improvement of the destination offers), as well as the planning and networking of destinations and raising the bar when it comes to services, not only the investments in infrastructure projects such as new hotel complexes and golf courses. At this point there is no shortage of ideas and solutions.

• What kind of a tourist country would you like Croatia to be?

Following attributes were highlighted: frequently visited or even better than today, for a season to last longer so that more people could have jobs, a pleasant place for enjoyment and well known to the world. Various ideas were given but always from the pragmatic sphere. The visionary idea of Croatian tourism in the future was not clearly made through the conversations that were led.

• Does Croatia even have a (cultural) travel identity?

This question also gave the interviewees something to think about, but in the end they all had the same opinion. The answer was that there is no identity. Croatia is the country of sun and sea and this is the only reason why tourists arrive. So in a way, this could be viewed as the touristic identity. The interviewees could not decide when talking about the cultural touristic identity since they are aware of the cultural potentials and heritage, but believe that this is just not enough, or at least deliberately placed in the tourist offer.

All participants have spoken about the opportunities and needs of tourism development in Croatia with enthusiasm, probably because this is the course of their existence. Many conclusions could be drawn from both their direct answers and all that they did not know or say. For example, the most important insight for this paper is the fact that there is no definite answer to the question of cultural touristic identity. There are various opinions and assumptions regarding what it could or should be, but it is clear that the answer cannot be given if it actually does not exist. It is also evident that a certain level of distrust in the ability of political structures has occurred due to an influence of various events in politics over the last decade that have made it difficult to believe that something meaningful can be changed in tourism, starting with a very tricky slogan “The Mediterranean as it once was” (which will be retired by the end of this year as the new marketing campaign is currently being developed). Many other resources have been identified that unfortunately still do not participate enough in the Croatian tourism offer, like the entire continental region that has been ignored in practice, although declarative necessity is emphasized for its tourism revival and some market niches such as health tourism that provide exceptional revenue opportunities and cooperation. Indicative and often repeated fact by the guests is that they could not expect what they have seen and experienced and could not prepare themselves for everything that was offered to them. This is the best illustration of unsatisfactory promotion and the whole picture that we are sending to the potential customers in the market. One might think that many guests arrived to Croatia by accident, because they have seen everything else so why not visit this area as well. With a well-known fact that the Croatian destinations lack souvenirs that would appropriately represent the places they came from as well as the frequent lack of knowledge of other holiday possibilities in Croatia except for swimming in the summer, one might conclude only one thing: there is no story about Croatia. There is no systematic commercial, a complete product that would represent all the treasures of the Croatian tourism potentials. What is missing is the exact thing that could forever sustain strong competitors in a stable market position of a desired destination and help weaker competitors or new tourist contenders to rise from the gray zone of the unknown or unwanted and equal the playing field in the global tourism market — a defined touristic identity.
CONCLUSIVE GUIDELINES

What can be done in order to change the current situation? Why it should change was discussed in the former text but the most important finding can be found in the following message: all the countries that have led an active tourism policy that has enriched the offer, brought new products and services, improved quality, had higher capacity utilization and thus, higher profits. No country was able to protect its own tourism if the tourism product was not competitive on the world market. What makes a particular destination different from all others gives it a competitive advantage and makes it interesting to potential tourists and visitors. None of this would be possible if you do not consistently adjust existing, without innovation and new ideas, without continuous restructuring of existing and construction of new and ever more attractive tourist attractions. This is nothing other than creating your own future! (Vukonić, 2010). For the sake of the future of the tourism sector in this country that will surely be bringing profit for a long period of time, as well as increasingly necessary number of staff that will have to adapt to the new economic trends on the global and national market, it is essential to understand that the concept of tourism identity is the basic predisposition of further planning and tourism development. It later becomes an indispensable part of common national identity that is missing in Croatia due to various historical and political reasons, and can only contribute to a better positioning of the country in the perception of potential clients. Indeed, numerous studies have already demonstrated this process, and Simon Anholt who is an unquestioned authority in this field has proposed the concept of a competitive identity. This notion was developed as a replacement for a widely accepted economic term brand, which for the purposes of this topic did not meet an approval, but it describes just that – branding the country. Branding creates a differentiation and uniqueness, or a distinction from the competition, unique emotional association, relevant stake in consumer awareness, brand longevity and higher financial value (Skoko, 2009). In today’s globalized world countries are forced to approach the diverse global market with a clear, credible, appealing, distinctive and fully-planned vision, identity and strategy. The same author states (Anholt, 2009) that it is the tourism promotion that is one of the six natural channels through which a national image is created because the tourists will spread the news about a country faster and further through their own experiences. It has been proven that an international community relies on these kinds of messages much more than other sources such as official government information. The focus has shifted from the classical promotion to managing an identity and image. Many countries, regions and cities have started such an extensive program in order to differentiate themselves from others and reach out to their customers. The easiest way to build that bridge is across cultures, since it connects a country’s past and present and it is somehow the only precious factor of identity because it is not related to commercial activities (Skoko, 2009).

Therefore, the following three factors are essential when creating an identity: a vision is necessary, not only on paper, as well as a strategy in practice and not only as a document. First and foremost, it is necessary to change mentality and behavior because it is the only way that will ensure that a potential audience will see that a country is serious in their ways. Creation of a bad image is often not due to media or the public itself, but rather lethargic state that is not doing enough to sustain the attention of their targeted audience. It is time that we stop to let tourism happen to itself in Croatia. Instead, we need to plan it and direct it in the way in which we wish for it to go. Reactions towards the development of tourism flows have been slow until now because no one cared if the tourists came since the only question was only when they will show up. However, this approach is not something that could play out forever. We only need to take a look at other competitive Mediterranean countries as examples and it becomes very clear where the summer mass tourism approach led them. Even when the beach tourism is the only resource it should be controlled so that the foundations on which it is based are not destroyed, taking into account the sustainable development. Here lies the key item of education. The states should educate in this field from an early age in order to create young enthusiasts who are proud of their own heritage. Satisfied with this feeling of belonging exactly where they are, they will later on easily transmit these positive attitudes towards the outside. Another aspect of education refers to the targeted training of professional staff that will be involved in tourism that is a lot different from what we see in tourism today. Today’s tourism is often classified as hospitality, and the quality of it stays questionable.

The creation of an identity for a country, region or city as stated by Anholt, is composed of 80 percent innovation, 15 percent of coordination and only 5 percent communication. The emphasis is on work, action and desire to create a new, successful image of a country, because without engagement there will be no result. The end result can be viewed in the following strategy: use innovation to create own identity within the audience that will create the desired impression and encourage them first to travel to our country. Then change the attitudes about what Croatia really is today. If we will not create our own brand or identity, someone else will do it for us – the media, general public, and our tourists. In that case, we should not be surprised if the result is not satisfactory.
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VIRAL MARKETING IN TOURISM: EFFECTS OF SOCIAL MEDIA

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ABSTRACT
‘Viral marketing’ refers to marketing techniques used by existing social media networks and other similar online technologies in order to raise consumer awareness of the existence of particular products and services or to achieve other marketing objectives, such as sales, with the use of self-replicating processes that are reminiscent of spreading of computer viruses.

Viral marketing is conducted through Internet campaigns with users sharing and sending each other interesting and entertaining content. In that regard social bookmarking is considered as one of the fastest methods for Internet users organizing, sharing, and managing web resources. This proved to be cheaper and more effective than campaigns using traditional methods of promotion.

This article will explore the effects of sharing and promoting tourism related information through social media. The main research goal is to examine which type of content would make the viral impact (the number of shared content) stronger. A small family-run hotel was be used as a test case in order to examine the best possible context for message forwarding. This campaign was presumed be successful if we managed to create the effect of “desire” in users of the Hotel’s Facebook page to forward this information. Also, it would provide a nominal scale regarding the needed format of the message in the form of “funny”, “amazing/spectacular”, “controversial” or “highly helpful” and “unique” as a prerequisite for achieving the needed “desire” to share.

KEY WORDS: Viral marketing, Internet campaign, Social media, Social bookmarking, Sharing.

1. INTRODUCTION

Viral marketing refers to marketing techniques used by existing social media networks and other similar online technologies in order to raise consumer awareness of the existence of particular products and services or to achieve other marketing objectives, such as sales, with the use of self-replicating processes that are reminiscent of spreading of computer viruses.¹ Viral marketing is also a marketing tool that persuades users or websites to pass on marketing massages to other users or websites, thereby growing exponentially across the Internet, often via social networks such as Facebook or Twitter.²

Viral marketing may take the form of video clips, interactive Flash games, advergames, eBooks, brandable software, images, text messages, email messages, or web pages. The creative nature of viral marketing enables an “endless amount of potential forms and channels the messages can utilize for transmission”.³

The ultimate goal of marketers interested in creating successful viral marketing programs is to create viral messages that appeal to individuals with high social networking potential (SNP) and that have a high probability of being presented and spread by these individuals and their competitors in their communications with others in a short period of time.⁴

This paper concentrates on a type of user generated content that is somewhat important to researchers and practitioners in the tourism industry (especially those pertaining to hospitality/hotel industry and marketing/brand management). Specifically, it focuses on exploring the effects of sharing and promoting tourism related information through social media.

The main research goal is to examine which type of content would make the viral impact (the number of shared content) stronger. The ultimate goal would be to create a marketing campaign that would grow quickly without any extra advertising cost for hoteliers. A small family-run hotel is used as a test case in order to examine the best possible context for viral message forwarding.

This campaign would presumably be successful if it managed to create the effect of “desire” in users on the Hotel’s Facebook page to forward this information. Also, it would provide a nominal scale regarding the needed format of

² Digital: What is Viral Marketing? (Online) Travel Trade Gazette UK & Ireland, 05/07/2010. (accessed 05.09.2014.)
the message in the form of “funny”, “amazing/spectacular”, “controversial” or “highly helpful” and “unique” as a prerequisite for achieving the needed “desire” to share as shown in the Figure 1. In continuation, the paper looks at the possibility of achieving these goals.

During the 2014 tourist season, the video clips released on the Hotel’s Facebook page were specifically designed to create the effect of desire. These video messages lasted no more than one minute. After their release it was monitored how many times these messages were shared amongst the public. Themes of the video messages depended on the events that took place at the hotel.

Figure 1. Nominal scale messaging form

2. GOING VIRAL

Ever since Wieden & Kennedy’s body-wash campaign for Procter & Gamble become a viral sensation with millions of views, hundreds of response videos and a bump in product sales, bands have been clamouring to find their own Isaiah Mustafa success story.

Viral marketing and its ability to generate buzz around brands can turn relative unknowns into celebrities and put the names of their products in the mouths and in the email boxes of millions overnight. Also, the efficiency of viral marketing is related to how fast the messages are transmitted and the number of people they reach spontaneously. Therefore, viral marketing carried out in a virtual environment will show its impact very shortly and reach more people.

There is no secret. All kinds of information can go viral, and the message can be hijacked. It’s much more of a skill to successfully reach target audiences. If a scientific formula existed to make content go viral, everyone would be using it, and the term viral would have long since lost all meaning. However, this has not stopped researchers from trying to figure it out. In pursuit of a viral recipe, Jonah Berger, a professor at the Wharton School of the University of Pennsylvania, studied how products, ideas, and behaviours become popular as research for his book. He studied the most emailed New York Times articles and noted commonalities. Viral content tended to inspire feelings of awe, anger or anxiety. But that is only part of the bigger picture in which content must do more than evoke an emotional response. To improve your chance of going viral, it should also be visually gripping, intelligent, witty, and provided with a context. Mixing these ingredients will compel people to share the content because it makes them seem smart by association. You are crafting content for conversation and knowledge is contagious.

Viral content delivers messages by creating a connection between people, enhancing social capital through reciprocity and sharing, offers solutions to real problems, and satisfies the brain’s need to know what happened. In the same way,

5. What is the secret to creating great viral content that will engage your audience? (Online) PR Week (US) 16.12 December 2013. p47. General OneFile. (accessed 05.09.2014.)
6. Ibid. p47.
7. Ibid. p47.
this viral campaign tried to follow this path, and that means to generate a buzz around a small family-run hotel presenting activities that took place in the hotel during the tourist season. Sending this information to people we know (such as friends on the Hotel’s Facebook page) would presumably result in the sharing of this information further because they believed in the value of the information. Consequently, this information would increase interest from the wider public and therefore facilitate other marketing objectives, such as hotel sales.

2.1. How virals spread

Some researchers say that unless you’re giving something away for free, a lot of viral content is pure luck. You can have a fantastic, creative idea but you never quite know why it is or isn’t going to catch on to the public.\(^{12}\) Today, many consumers have digital communications at their fingertips, and information travels rapidly via emails, blogs, Internet links, and mobile phone text messages. Two Mainers achieved overnight notoriety with a video of a backyard demonstration of what happens when 523 Mentos mints are dropped into 101 two-litre plastic bottles of Diet Coke. The men choreographed the geyser effect to resemble the dancing fountains at Bellagio Hotel Las Vegas, shot video of it, and posted it online where, within hours, is scored thousands of views and the attention of producers of both major television networks in the USA.\(^{13}\)

It created an attention boom really quickly. This was truly viral in every sense. It created content, distributing content, and there’s a lot of word of mouth about it that actually soared all the way up to the mainstream media. That is something that is happening more and more with this social media movement. In that regard many publishers are finding that Facebook is becoming the dominant place for off-channel views, as sharing and embedding clips achieves critical mass. Facebook is the largest social network and is a channel in which users spend more time than any other network. It’s an opportunity for brands to tell their story and establish a meaningful relationship with their existing and potential fan base.\(^{14}\)

Facebook news feeds are the most coveted internet spaces as you get your name, logo, message, and a personal recommendation in one hit and for free.\(^{15}\) Respondents were most likely to talk about expectations (product and look and feel) on Facebook, then in any other media for that matter. In other words, people posted their responses on Facebook when their experiences were better than they had expected.\(^{16}\)

The biggest opportunity that is presented by using content marketing on Facebook is through status updates. A status update is a post that a brand makes that is then shared in their newsfeed with the content being shared by their friends, colleagues and family members. The content published by a brand can then be interacted with by users and ultimately reach thousands if not millions of users in the matter of minutes. It’s through interactions such as likes, shares and comments that allow Facebook to be an essential part of a content marketing plan.\(^{17}\)

It’s easy to share content on Facebook but it’s difficult to share content worth sharing. Content worth sharing is content that drives engagement from your fans and sparks some sort of interaction or conversation. A post that doesn’t spark any interest from users is a post that you could have done better without actually sharing.\(^{18}\)

Through this research using the small family-run hotel and posting viral messages on the Hotel’s Facebook page, have presumably caused “desire” in users to share the viral message to other Facebook users, like their friends, colleagues, family members etc.

Also, presumably it would provide a nominal scale regarding the needed format of the message in the form of “funny”, “amazing/ spectacular”, “controversial” or “highly helpful” and “unique” as a prerequisite for achieving the needed “desire” to share viral message.


\(^{13}\) Ibid. p24.


\(^{15}\) Marketing Magic: Viral touch. (Online) Travel Trade Gazette UK & Ireland, 09/29/2011. p35. (accessed 20.08.2014.)


\(^{17}\) Ibid.

\(^{18}\) Ibid.
3. SMALL FAMILY-RUN HOTEL

The Bella Vista hotel is a 4-star hotel situated in Drvenik, 28 km south of Makarska. It was built in 2008 in a typical Croatian coastal style and is adorned by elegance, high quality and variety of amenities.\(^{19}\)

The hotel is characterised as a small family hotel with a total capacity of 33 luxuriously equipped rooms and 7 comfortable suites. Other hotel amenities include a restaurant, a summer terrace with a bar and a wellness comfort zone (whirlpool, sauna and fitness centre).

Drvenik is a small inshore town on the Makarska seaboard belonging to the municipality of the town Gradac (southern part of Dalmatia region). It consists of two districts Gornja (upper) and Donja (lower) Vala, with a mutual distance of about one kilometre. The Bella Vista hotel is situated in Gornja Vala at a distance of 50 m from the sea and it only operates in season, from beginning of April to the end of October.

As such, the hotel represents an excellent choice for conducting this research on viral marketing in tourism industry today. Taking advantage of viral marketing ideas that involve the use of Hotel’s Facebook page and posting video messages should help hotel increase online traffic, alongside recognition and hotel branding. When using the viral marketing in the right way, it could also serve to make a whole lot of backlinks for the hotel’s web site, which could propel hotel rankings on search engines to a very high level.

3.1. Hotel Bella Vista Facebook Page

Ever since the internet has been invented and social media sites have appeared, it is possible to use viral marketing without having to do too much effort. Social networking sites, such as Facebook pages, are some very good places to start using viral marketing.\(^{20}\)

Hotel Bella Vista management wanted to explore these new possibilities, and therefore in 2011 they created a fan page on Facebook with the goal to present its services to a wider audience. At the beginning, the page served merely as a place where hotel photographs were presented hoping people will like them and will share the fan page with their friends, who will then share it with theirs and so on.

Consequently, there would presumably be a lot of people who would look at the fan page and chances are that many of them would also be interested in hotel product and services. Hoping to achieve this, hotel management was clearly looking to increase traffic on its own website and therefore to make more direct hotel reservations.

**Picture 1.** Bella Vista hotel, Facebook page

![Hotel Bella Vista Facebook Page](https://www.facebook.com/pages/Hotel-Bella-Vista/223403511022046?fref=ts)

\(^{19}\)Hotel Bella Vista (Online) Available:  [http://www.hotelbellavista.hr](http://www.hotelbellavista.hr) (accessed 15.06.2013.)

\(^{20}\)Effectively Using the Best Viral Marketing Strategy Is the Key To Maximizing Your Online Appeal (No date). Available: [https://thehostgroup.com/effectively-using-the-best-viral-marketing-strategy-is-the-key-to-maximizing-your-online-appeal/](https://thehostgroup.com/effectively-using-the-best-viral-marketing-strategy-is-the-key-to-maximizing-your-online-appeal/) (accessed 21.09.2014.)
After the hotel’s first effort and with the “maturation” of Facebook users, nowadays marketing strategy is shifting from the basic sharing information to more sophisticated techniques on how to raise consumer awareness of the existence of particular products and services.

Basically, hoteliers are looking to use new online marketing ideas for the same benefit as before. Viral marketing is one of those newly marketing techniques that have a great potential for the hotel industry. What it all comes down to is that hoteliers will be using viral marketing strategies to get a load of traffic to hotel website hoping to increase the amount of reservations it can produce. And this is the real answer why viral marketing could be important for hoteliers, particularly for the small family-run hotels in regard to their limited marketing budget.

Therefore in the remaining text viral marketing campaign that took place during the 2014 tourist season is explained.

4. VIRAL MARKETING CAMPAIGN

Viral marketing was designed to help users to share and send each other interesting and entertaining content, so the most important thing was to keep in mind that the viral message needs to have good content. Most likely users will share massages that are witty, informative, entertaining or captivating.21

The presumption was that this campaign would be successful if it managed to create the effect of “desire” in users on the Hotel’s Facebook page to forward presented information. Therefore four video clips were designed.

Video clip 1. Beer road

Depicts tradition of the youth form the village involving dancing and singing around, and having a small beer as method of support.

Source: https://www.facebook.com/pages/Hotel-Bella-Vista/223403511022046?fref=ts

Video clip 2. Quarrel of the goods

Filmed in front of the hotel during storm when in pitch black sky thunderstorm and lighting appeared continuously for a couple of hours.

Source: Ibid.

Video clip 3. Cyclone

Tourism season 2014 was characterized by numerous rainy days and cyclones. One of those days was presented in this video clip.

Source: Ibid.

21Ibid.
Video clip 4. Dancing show

Presents a dancing show and entertainment for the guests during one summer evening.

Source: Ibid.

It was hoped that these video clips would create attention as quickly as possible, and therefore viral campaign started after all video messages were concluded and posted on the Facebook page in a sequence of couple of days, one after another.

4.1. Results

The viral campaign results are presented in the following text.

Picture 2. & 3. Hotel Facebook Fun Page

First video clip (Picture 2) reached 702 people resulting in 1 share and 12 people liking its content.

Second video clip (Picture 3) reached 423 people resulting in 8 likes

Source: Facebook page (accessed 25.09.2014.)
4.2. Effects of social media

Surprisingly, the findings of this viral campaign showed only a small percent of fans actually shared Facebook page posts. The video clip that depicts dancing show and entertainment for the guests was the most viewed reaching the largest group of Facebook fans and producing two shares.

Second in line was the video showing tradition of the youth form the village involving singing and dancing which also reached a large number of people and did create much needed effect of “desire” to share this information (at least for one Facebook user). Therefore, some of the viral messages did produce the effect of desire, but a limited one, respectively only a small number of fans reshare posts.

In the view of presented nominal scale regarding the needed format of the message in its form of “funny”, “amazing/spectacular”, “controversial” or “highly helpful” and “unique” as a prerequisite for achieving the needed “desire” to share, this paper suggest that funny video messages involving large group of people have more chance to be successful then the others.

Beer road and Dancing show video messages were characterized as funny and were reshared by the fans. The other two video messages characterized as spectacular (Quarrel of the Gods) and controversial (Cyclone) where not so successful. Results presented in this paper showed that stronger viral impact and higher consumer awareness of the existence of particular products and services, such as hotel product and services, needs to involve substantial number of people in different hotel activities and above all, entertaining content.
5. CONCLUSION

Results of this paper:

• Viral marketing enables a transfer of information to other people free of charge and it is good for hoteliers to occasionally use it to provide information to its dedicated fun base.

• Designed viral messages in line with nominal scale messaging form proved to have partial success because it proved that “funny” video clips in combination with larger group of people involved compelled people to share, but on the other hand, “spectacular” and “controversial” messages did not have the same effect.

• Most hotel Facebook fans follow posted messages, but do not engage beyond mere recognition.

• Finally, messages that spread on the Hotel Facebook fun page need to be entertaining and need to involve substantial number of people in different hotel activities for stronger viral impact.

Finally, maybe it was unrealistic to expect larger percentage of fans to reshare the content, but promoting tourism related information through social media is still a very good way to reach larger audiences, particularly for the owners of small family-run hotels and their limited marketing budgets. How to create successful viral marketing campaigns that would reach more people is still something that future researchers need to explore further.

LITERATURE

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IMPACT OF SALES TRAININGS ON SALES RESULTS OF A CROATIAN COMPANIES

PETAR MAJSTROVIĆ
MIRKO PALIĆ
MARIJA TOMAŠEVIĆ LIŠANIN

ABSTRACT
At the time when most executives struggle with how salespeople should add value, especially in today's multi-channel environment, ever greater sales effectiveness is needed. An important indicator of an effective sales force training program is the evaluation of whether or not the training has directly impacted professional selling. Despite of spending significant resources on sales trainings, assessing the training effectiveness often seems to be a challenging task for the Croatian companies. The main goal of this paper was to investigate the existence of direct relationship between sales trainings and sales results in the Croatian companies. Using the four level model (1 reactions, 2 learning, 3 behavior, 4 results) developed by Kirkpatrick evaluation has been done for each level. Information from each prior level served as a base for the next level's evaluation. Thus each successive level represented a more precise measure of the effectiveness of the training program, but at the same time required a more rigorous and time consuming analysis. Research sample consisted of 200 sales professionals from different Croatian companies. Since there is little empirical work available as a guide in the design and implementation of sales training programs, research results offered direct implications for enhancing sales training programs on the Croatian market. The results provided empirical evidence of the importance of sales trainings investment as a means of increasing the sales performance.

KEY WORDS: Sales, Sales Training Evaluation, Croatia.

1. INTRODUCTION
Training in wider sense can be defined as set of methods that are used in working with new or existing employees in order to transfer knowledge and skills necessary for successful completion of their work tasks. In sales, trainings are set of activities by which companies try to ensure business culture, knowledge, skills, attitude and behavior that will result in better sales results (Futrell, 1998, p. 216). Successful and growing organizations have recognized talents of their employees and actively work on development of those talents in order to secure its future business success. Employees learn and develop its competencies through acquiring experience while working but also through different types of educational programs and trainings. It is often necessary to upgrade experience gained from work by additional trainings (Futrell, 2004, p. 121). Johnston and Marshall (2009, p. 314) write that sales trainings are a “huge business” in the United States. According to the Training Magazine American companies spent 50 billion dollars in year 2006 on trainings and development of employees. According to The American Society for Training and Development, (Lask et al., 2012, p. 2) American companies annually invest around 15 billion dollars in the sales trainings and educations alone. This means that 30% of budget for education and training goes into sales trainings. Average salesman in the U.S. spends about 33 hours on a training each year. In a tech based companies education of a sales representative or specialist often costs over 100.000 U.S. dollars and because of the high initial cost of developing salesperson companies might wait on return on investment in trainings for more than two years (Johnston & Marshall, 2009, p. 315). The main goal of this paper has been to find out to what extent sales trainings contribute to sales results and how the performance of sales trainings are measured in a Croatian companies.

2. PERFORMANCE MEASUREMENT OF SALES TRAININGS
Importance and necessity of sales trainings are beyond question. However, one of the main challenges connected with this area is measurement of performance of delivered sales trainings (Futrell, 1981, p. 231). The main reason for evaluating is to determine the effectiveness of a training program.” (Kirkpatrick, 1994, p. 3). It is highly important for organization to understand how will training help in rising efficiency and quality of salesforce's work. Companies more and more cooperate in designing specific sales trainings and need to know exact outcomes to be expected from it. The key question is to calculate financially return on investment of a sales training and to improve its efficiency. Training evaluations are quite often based on “soft” or qualitative variables such as change in behavior and what is learnt. However, companies need to know how to quantify such training outcomes through increased sales and profitability in order to calculate return on investment in sales trainings. Therefore, the best method would include both, qualitative and quantitative measures of performance (Palić, 2008, p. 278). There are two basic approaches to the evaluation of trainings. First is internal approach where companies evaluate efficiency of the training while it is still in an application phase. Internal approach is focused on training process itself. Key question is to learn
if the training goals and learned skills have been successfully applied into a business practice. Second is *external approach* which is focused on evaluating efficiency of the training after the application phase and observed results can be described through individual and group goals. In order to measure performance of the training it is necessary to systematically document results of the training activities and to observe the changes that took place. Tests and exercises that measure adopted knowledge and skills of participants before and after the training can be used for this purpose. Also a control group method can be used as well as a combined approach. Evaluation approach will depend on resources available to the company, number of training groups and importance of training for the overall goals of a company. According to Cscio (1998, p. 279) trainers and investors of trainings should focus on answering the following questions when attempting to measure its performance:

1. Did participants acquire specific knowledge, skills or work performance?
2. Did change occur?
3. Has change been a result of a training?
4. Is change positively affecting reach of sales/corporate goals?
5. Will similar changes occur with new participants of the sales trainings?

Organizations that have the resources to measure training’s performance according to scientifically and globally adopted methods usually choose between two standard models: Kirkpatrick’s four levels training evaluation model and Phillips’ The Fifth Level of Evaluation.

The last model is actually a revised Kirkpatrick’s model with added another level - the fifth level of evaluation which is developed by collecting level 4 data, converting the data to monetary values and comparing them to the cost of the program to represent the return on training investment. Organizations are taking a logical and methodical approach to developing ROI for a limited number of programs, using a sampling basis. Six trends have increased interest in, and use of, ROI measurement in training and development (Phillips, 1996):

- Training and development budgets are continuing to grow, which creates more pressure for accountability.
- Training and development are linked to the competitive strategies, which make them important areas for measuring program contribution.
- Many programs have failed to deliver what was expected; consequently, program sponsors have requested ROI calculations/justifications.
- The concern for accountability in all functions in an organization is increasing; thus, the training and development function becomes one of many support efforts under scrutiny.
- Top executives in a large number of organizations now require ROI information.
- To justify their contribution, trainers have increased their interest in the ROI process.

Previous research done in Croatia indicate that Croatian companies have relatively high education and training benefit awareness. Product knowledge and selling skills are the most represented topics in sales education and training programs in Croatia while Motivation and Time management seems to be underestimated. Research also showed that Croatian companies does not evaluate training programs systematically and consistently (Tomašević Lišanin, M, Palić, M., Ozimec, K., 2009, p. 109). Some of the variables commonly used for sales trainings evaluation can be seen in table 1.

**Table 1.** Most commonly used variables for evaluation of sales trainings in Croatian companies

<table>
<thead>
<tr>
<th>TRAINING EVALUATION</th>
<th>NEVER</th>
<th>RARELY</th>
<th>SOMETIMES</th>
<th>OFTEN</th>
<th>ALWAYS</th>
<th>AVERAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count</td>
<td>Percent</td>
<td>Count</td>
<td>Percent</td>
<td>Count</td>
<td>Percent</td>
</tr>
<tr>
<td>Change in sales volume</td>
<td>10</td>
<td>13.0%</td>
<td>9</td>
<td>11.7%</td>
<td>23</td>
<td>29.9%</td>
</tr>
<tr>
<td>Change in sales value</td>
<td>7</td>
<td>9.1%</td>
<td>7</td>
<td>9.1%</td>
<td>23</td>
<td>29.9%</td>
</tr>
<tr>
<td>Change in market share</td>
<td>13</td>
<td>16.9%</td>
<td>10</td>
<td>13.0%</td>
<td>24</td>
<td>31.2%</td>
</tr>
<tr>
<td>Order taken per sales visit</td>
<td>21</td>
<td>27.3%</td>
<td>10</td>
<td>13.0%</td>
<td>23</td>
<td>29.9%</td>
</tr>
<tr>
<td>Order taken per call number of new clients gained</td>
<td>24</td>
<td>31.2%</td>
<td>12</td>
<td>15.6%</td>
<td>19</td>
<td>24.7%</td>
</tr>
<tr>
<td>Number of old clients lost</td>
<td>11</td>
<td>14.3%</td>
<td>7</td>
<td>9.1%</td>
<td>23</td>
<td>29.9%</td>
</tr>
<tr>
<td>Territory coverage</td>
<td>19</td>
<td>24.7%</td>
<td>10</td>
<td>13.0%</td>
<td>25</td>
<td>32.5%</td>
</tr>
<tr>
<td>Post-training knowledge testing</td>
<td>23</td>
<td>29.9%</td>
<td>5</td>
<td>6.5%</td>
<td>22</td>
<td>28.6%</td>
</tr>
<tr>
<td>Sales target realization</td>
<td>18</td>
<td>23.4%</td>
<td>9</td>
<td>11.7%</td>
<td>21</td>
<td>27.3%</td>
</tr>
<tr>
<td>Time sales people stay with the company</td>
<td>15</td>
<td>19.5%</td>
<td>5</td>
<td>6.5%</td>
<td>20</td>
<td>26.0%</td>
</tr>
</tbody>
</table>

Source: Tomašević Lišanin, Palić, & Ozimec, 2009, p. 108
3. KIRKPATRICK’S FOUR LEVEL EVALUATION MODEL

The four levels represents a sequence of steps to evaluate sales training programs. As researcher moves from one level to the next the process becomes more difficult and time-consuming, but also provides more valuable information. The four steps in evaluation are; Reaction, Learning, Behavior and Results. Reaction as word implies, measures how participants in the sales trainings react to it. It is actually a measure of their satisfaction with training. Success of sales educations depend on a positive reaction. If participants do not react favorably, they will probably not be motivated to learn. Learning can be defined as the extent to which participants change attitudes, improve knowledge, and/or increase skills as a result of attending the program. In order to evaluate learning, the specific objectives must be determined. Learning did not happen if change in behavior did not occur. In this specific setting the learning has taken place when one or more of the following occurs: attitudes are changed, knowledge is increased, skills are improved, change of behavior is the next step. Behavior can be defined as the extent to which change in behavior has occurred because the participants attended the training program. Finally, results can be defined as the final results that occurred because the participants attended the program. The final results can include increased sales, reduced turnover, and higher profits and return on investment. It is important to understand that results are the ultimate reason for having the training programs. Therefore the final objectives of the training program need to be stated in these terms (Kirkpatrick, 1994). For the evaluation research a series of statements have been used that best fit the purpose of each level:

**Level 1 – Reactions**
- Trainings have been interesting
- Content of training have been relevant for my work
- Trainings have been adjusted to my business situations
- Trainers have been well prepared and competent
- Contents of training will be applicable in practice
- Training will be useful for better sales performance
- Overall perception about training is positive.

**Level 2 – Learning**
- I have gained new or improved existing theoretical knowledge about the sales
- I have gained new or improved existing practical sales skills
- I have learned and improved question techniques for defining customer needs
- I have learned and improved product presentation skills
- I have learned and improved customer’s objections solving techniques
- I have learned and improved sales approach based on assisting customer to make solution for his needs
- I have learned more about sales closing techniques
- Overall, I have learned knowledge and skills for professional sales work

**Level 3 – Behavior**
- After sales training I am interested to try in practice new knowledge and skills
- Good elements of training will be immediately applied
- Old sales methods will be rejected after learning about the better ones
- I adjust or change my work with customers in accordance with useful suggestions from training
- My superiors encourage me to apply new knowledge and skills
- My company formally follows and periodically evaluates my sales performance
- My company financially rewards good sales results
- Overall, in my company there is a real possibility of application of sales knowledge and skills that have been subject of trainings.
Level 4 - Results
- I have found new customers as a result of sales trainings.
- I have increased or kept the same level of sales volume.
- Trainings helped me in achieving my sales plan/quota
- I have improved personal contacts with customers
- I have increased level of customer satisfaction with my company
- Trainings brought attention to certain elements that I can improve in my work
- Overall, trainings directly and indirectly contributed to my sales results and quality of my sales performance.

4. RESEARCH GOALS AND METHODOLOGY

Based on Kirpatrick’s four level training evaluation model, which is still the most commonly used evaluation model (Dubinsky, A.J., Mehta R., Anderson, R. E., 2001, p. 30), the following hypothesis have been proposed:

H1: There is direct connection between intensity of sales trainings and sales results of salesmen in Croatian companies.

H2: There is a direct connection between sales trainings and level of sales knowledge of sales force in a Croatian companies.

H3: Management in Croatian companies does not show enough interest for a real application of sales trainings which makes sales trainings less effective in a business practice.

The specific goals of the research were to explore and measure the impact of sales trainings on:
- Sales results
- Sales personnel work performance
- Sales knowledge and skills
- Satisfaction and motivation of sales force

5. SAMPLE

Questionnaire has been sent by e-mail to 950 addresses during April and May 2011 and after two additional reminders 200 correctly filled questionnaires have been collected which is response rate of 21.05%. In order to be eligible for filling the questionnaire respondents had to participate in at least one sales training (education) during their employment. The sample had some more requirements; respondents had to be currently employed on a sales positions in a companies and engaged in a business to business type of sales. Considering assumption that observed sales processes are relatively homogeneous in a research population results are formally indicative but actually representative for the Croatian market.

Collected data has been processed in SPSS 17 and analyzed through descriptive statistics as well as inferential statistics.
6. RESEARCH RESULTS

Research results have been presented according to each evaluation level. Demographic characteristics of the sample are given in Table 2.

Table 2. Demographic variables of respondents

<table>
<thead>
<tr>
<th>Age</th>
<th>Frequency (n)</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 25 years</td>
<td>2</td>
<td>1,0</td>
</tr>
<tr>
<td>25 - 32 years</td>
<td>61</td>
<td>30,5</td>
</tr>
<tr>
<td>33 - 45 years</td>
<td>119</td>
<td>59,5</td>
</tr>
<tr>
<td>46 - 60 years</td>
<td>17</td>
<td>8,5</td>
</tr>
<tr>
<td>&gt; 60 years</td>
<td>1</td>
<td>0,5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency (n)</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>118</td>
<td>59,0</td>
</tr>
<tr>
<td>Female</td>
<td>82</td>
<td>41,0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Education level</th>
<th>Frequency (n)</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Postgraduate degree</td>
<td>38</td>
<td>19,0</td>
</tr>
<tr>
<td>University degree in business field</td>
<td>92</td>
<td>46,0</td>
</tr>
<tr>
<td>University degree of some other field</td>
<td>37</td>
<td>18,5</td>
</tr>
<tr>
<td>High school</td>
<td>33</td>
<td>16,5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Years of experience in sales</th>
<th>Frequency (n)</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 1 year</td>
<td>8</td>
<td>4,0</td>
</tr>
<tr>
<td>from 1 to 3 years</td>
<td>26</td>
<td>13,0</td>
</tr>
<tr>
<td>between 4 and 8</td>
<td>57</td>
<td>28,5</td>
</tr>
<tr>
<td>between 9 and 15</td>
<td>74</td>
<td>37,0</td>
</tr>
<tr>
<td>more than 15 years</td>
<td>35</td>
<td>17,5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Employment position</th>
<th>Frequency (n)</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales manager/specialist selling on field</td>
<td>33</td>
<td>16,5</td>
</tr>
<tr>
<td>Sales manager/specialist in telesales</td>
<td>4</td>
<td>2,0</td>
</tr>
<tr>
<td>Sales support</td>
<td>122</td>
<td>61,0</td>
</tr>
<tr>
<td>Other sales positions</td>
<td>41</td>
<td>20,5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Personal sales plan</th>
<th>Frequency (n)</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>148</td>
<td>74,0</td>
</tr>
<tr>
<td>No</td>
<td>52</td>
<td>26,0</td>
</tr>
</tbody>
</table>

Table 3. Characteristics of companies respondents work for

<table>
<thead>
<tr>
<th>Number of employees</th>
<th>Frequency (n)</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 10</td>
<td>35</td>
<td>17,5</td>
</tr>
<tr>
<td>11 - 50</td>
<td>38</td>
<td>19,0</td>
</tr>
<tr>
<td>51 - 100</td>
<td>21</td>
<td>10,5</td>
</tr>
<tr>
<td>101 - 250</td>
<td>33</td>
<td>16,5</td>
</tr>
<tr>
<td>251 - 500</td>
<td>15</td>
<td>7,5</td>
</tr>
<tr>
<td>More than 500</td>
<td>58</td>
<td>29,0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ownership type</th>
<th>Frequency (n)</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private domestic ownership</td>
<td>108</td>
<td>54,0</td>
</tr>
<tr>
<td>Private foreign ownership</td>
<td>69</td>
<td>34,5</td>
</tr>
<tr>
<td>Government/public ownership</td>
<td>12</td>
<td>6,0</td>
</tr>
<tr>
<td>None of the above</td>
<td>11</td>
<td>5,5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sector</th>
<th>Frequency (n)</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>industry</td>
<td>37</td>
<td>18,5</td>
</tr>
<tr>
<td>trade</td>
<td>28</td>
<td>14,0</td>
</tr>
<tr>
<td>financial</td>
<td>26</td>
<td>13,0</td>
</tr>
<tr>
<td>education</td>
<td>15</td>
<td>4,0</td>
</tr>
<tr>
<td>IT &amp; telecom</td>
<td>15</td>
<td>7,5</td>
</tr>
<tr>
<td>Tourism &amp; hospitality</td>
<td>27</td>
<td>13,5</td>
</tr>
<tr>
<td>rest</td>
<td>59</td>
<td>29,5</td>
</tr>
</tbody>
</table>
In general terms it is possible to display a summarized results for all four levels. From the comparison of all four levels it is apparent that trend line shows decline as levels go up. This is consistent with the observations of other authors. As evaluation becomes more substantial grades go down as results (level 4) are harder to obtain than merely positive reaction (level 1) with the training after its ending. However, on a long run good sales results will result in a satisfied training participants but sometimes it takes long time for results to show in a sales of complex products and it is not always easily distinguished what and in which amount contributed to them. Graph 1 shows the summarized results for all four levels of sales training evaluation.

**Graph 1.** Summarized results of training performance by levels, Likert 5 degree scale.

![Graph 1](image)

Graph 2 displays evaluation of trainings by respondents in more detail. Average grading was done on 5 degree Likert's scale, 1 completely disagree – 5 completely agree.

**Graph 2.** Results of Kirkpatrick’s 4 level evaluation model of sales trainings

![Graph 2](image)
It is interesting to observe that highest average score received statements from level 3 regarding immediate application of good elements of the trainings (M=4.13) and “after sales training I am interested to try in practice new knowledge and new skills” (M=4.09) as well as a general statement from level 1 about overall positive perceptions with the trainings (M=3.97). Most negative grades are connected with learning skills how to make solution for specific customer needs (M=3.24), about lack of encouragement by managers for application of new knowledge and skills (M=3.29) and as a result of inability to find a new customers as a result of a sales trainings (M=3.34). Such results have dramatic implications for the efficiency of sales which will be further discussed in the concluding remarks at the end of this paper.

H1: There is direct connection between intensity (frequency) of sales trainings and sales results of salesmen in Croatian companies.

Kirkpatrick’s evaluation methodology’s Level 4 – Results have been used for testing of the hypothesis H1 combined with questions regarding types of sales trainings and frequency of sales trainings. In order to check for direct connection the correlation analysis has been used between level 4 variables and frequency of sales trainings. The results showed there was no statistically significant correlation between any level 4 variables and frequency of sales trainings as shown on table 4.

Table 4. Correlation between statements (variables) in level 4 and frequency of sales trainings

<table>
<thead>
<tr>
<th>As a result of sales training</th>
<th>Pearson Correlation</th>
<th>Freq. of trainings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 – I have found new customers.</td>
<td>.132</td>
<td>197</td>
</tr>
<tr>
<td>Sig. (2 - tailed)</td>
<td>.065</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>197</td>
<td></td>
</tr>
<tr>
<td>2 – I have increased or kept the same level of sales volume.</td>
<td>.070</td>
<td>197</td>
</tr>
<tr>
<td>Sig. (2 - tailed)</td>
<td>.327</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>197</td>
<td></td>
</tr>
<tr>
<td>3 – Trainings helped me in achieving my sales plan/quota.</td>
<td>.086</td>
<td>197</td>
</tr>
<tr>
<td>Sig. (2 - tailed)</td>
<td>.231</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>197</td>
<td></td>
</tr>
<tr>
<td>4 – I have improved personal contacts with customers.</td>
<td>.047</td>
<td>197</td>
</tr>
<tr>
<td>Sig. (2 - tailed)</td>
<td>.513</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>197</td>
<td></td>
</tr>
<tr>
<td>5 – I have increased level of customer satisfaction with my company.</td>
<td>.015</td>
<td>197</td>
</tr>
<tr>
<td>Sig. (2 - tailed)</td>
<td>.839</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>197</td>
<td></td>
</tr>
<tr>
<td>6 – Trainings brought attention to certain elements that I can improve in my work.</td>
<td>-.083</td>
<td>197</td>
</tr>
<tr>
<td>Sig. (2 - tailed)</td>
<td>.245</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>197</td>
<td></td>
</tr>
<tr>
<td>7 – Trainings directly and indirectly contributed to my sales results and quality of my sales performance.</td>
<td>.061</td>
<td>197</td>
</tr>
<tr>
<td>Sig. (2 - tailed)</td>
<td>.393</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>197</td>
<td></td>
</tr>
</tbody>
</table>

However, when respondents who participated to at least 5 trainings were compared with those whose frequency was less than 5 trainings then it was obvious that on average more frequent participants gave on average higher marks to all but one statement from level 4 as shown on graph 3. Analysis of variance (ANOVA) also did not show any statistically significant differences between respondents that had different intensity of sales trainings.
Graph 3. Difference in average grade on level 4 according to frequency of training

![Graph showing difference in average grade on level 4 according to frequency of training.]

Table 5. Average grade on Likert’s 5 scale for Level 4 variables divided by source of sales training

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Specialized sales consulting/training company</th>
<th>In house sales training</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have found new customers.</td>
<td>3,34</td>
<td>3,37</td>
<td>3,30</td>
</tr>
<tr>
<td>I have increased or kept the same level of sales volume.</td>
<td>3,66</td>
<td>3,80</td>
<td>3,53</td>
</tr>
<tr>
<td>Trainings helped me in achieving my sales plan/quota.</td>
<td>3,57</td>
<td>3,61</td>
<td>3,54</td>
</tr>
<tr>
<td>I have improved personal contacts with customers.</td>
<td>3,67</td>
<td>3,66</td>
<td>3,68</td>
</tr>
<tr>
<td>I have increased level of customer satisfaction with my company.</td>
<td>3,63</td>
<td>3,63</td>
<td>3,64</td>
</tr>
<tr>
<td>Trainings brought attention to certain elements that I can improve in my work.</td>
<td>3,87</td>
<td>3,95</td>
<td>3,81</td>
</tr>
<tr>
<td>Trainings directly and indirectly contributed to my sales results and quality of my sales performance.</td>
<td>3,68</td>
<td>3,69</td>
<td>3,66</td>
</tr>
</tbody>
</table>

Regarding source of training, participants that received training from specialized sales consulting companies on average gave higher average scores to the statements from level 4. However, ANOVA test did not show existence of statistically significant differences between those two groups.

Considering all of the above the hypothesis H1 surprisingly has been rejected. Respondents who participated in more trainings did not consider them more useful than those who barely attended one or few trainings in their professional life. There has not been established direct statistical link between sales results and intensity of sales trainings.

**H2: There is a direct connection between frequency of sales trainings and level of sales knowledge of sales force in a Croatian companies.**
Level 2 – learning statements have been used for testing of hypothesis 2 also combined with question regarding frequency of sales trainings and types of educations. According to the ANOVA test there are statistically significant differences between respondents that attended different number of educations in a three different statements shown in table 6.

Table 6. Level 2 – One-way analysis of variance (ANOVA) according to variable frequency of trainings

<table>
<thead>
<tr>
<th>Learning statements</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learned and improved product presentation skills</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>7,819</td>
<td>2</td>
<td>3,909</td>
<td>4,284</td>
<td>.015</td>
</tr>
<tr>
<td>Within Groups</td>
<td>178,865</td>
<td>196</td>
<td>.913</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>186,683</td>
<td>198</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Learned and improved customer objections solving techniques</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>9,664</td>
<td>2</td>
<td>4,832</td>
<td>4,646</td>
<td>.011</td>
</tr>
<tr>
<td>Within Groups</td>
<td>203,873</td>
<td>196</td>
<td>1,040</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>213,538</td>
<td>198</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Learned and improved sales approach based on assisting customer to make solution for his needs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>11,364</td>
<td>2</td>
<td>5,682</td>
<td>4,401</td>
<td>.014</td>
</tr>
<tr>
<td>Within Groups</td>
<td>253,058</td>
<td>196</td>
<td>1,291</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>264,422</td>
<td>198</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Respondents that attended 5 and more sales trainings had higher marks for the above three variables from level 2 than the respondents that attended fewer sales trainings.

Average grade on Likert’s scale also showed that respondents attending more than five sales trainings gave higher score for all level 2 statements as shown in table 7.

Table 7. Level 2 Learning statements according to frequency of training – average grade on Likert’s 1-5 scale.

<table>
<thead>
<tr>
<th>Learning statements</th>
<th>Total average</th>
<th>Frequency of trainings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1 - 5 times</td>
</tr>
<tr>
<td>Gained new or improved existing theoretical knowledge about sales</td>
<td>3,71</td>
<td>3,64</td>
</tr>
<tr>
<td>Gained new or improved existing practical sales skills</td>
<td>3,60</td>
<td>3,52</td>
</tr>
<tr>
<td>Learned and improved question techniques for defining customer needs</td>
<td>3,73</td>
<td>3,69</td>
</tr>
<tr>
<td>Learned and improved product presentation skills</td>
<td>3,69</td>
<td>3,54</td>
</tr>
<tr>
<td>Learned and improved customer objections solving techniques</td>
<td>3,47</td>
<td>3,29</td>
</tr>
<tr>
<td>Learned and improved sales approach based on assisting customer to make solution for his needs</td>
<td>3,24</td>
<td>3,09</td>
</tr>
<tr>
<td>Learned more about sales closing techniques</td>
<td>3,62</td>
<td>3,51</td>
</tr>
<tr>
<td>Overall, learned knowledge and skills for professional sales work</td>
<td>3,75</td>
<td>3,63</td>
</tr>
</tbody>
</table>
Table 8. Correlation analysis of variables from Level 2 with frequency of trainings

<table>
<thead>
<tr>
<th>Variable</th>
<th>Pearson Correlation</th>
<th>Sig. (2 - tailed)</th>
<th>N</th>
<th>Pearson Correlation</th>
<th>Sig. (2 - tailed)</th>
<th>N</th>
<th>Pearson Correlation</th>
<th>Sig. (2 - tailed)</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gained new or improved existing theoretical knowledge about sales</td>
<td>0.106</td>
<td>0.138</td>
<td>199</td>
<td>0.092</td>
<td>0.196</td>
<td>199</td>
<td>0.071</td>
<td>0.322</td>
<td>199</td>
</tr>
<tr>
<td>Gained new or improved existing practical sales skills</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Learned and improved question techniques for defining customer needs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Learned and improved product presentation skills.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Learned and improved customer objections solving techniques</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Learned and improved sales approach based on assisting customer to make solution for his needs.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Learned more about sales closing techniques</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall, learned knowledge and skills for professional sales work</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

There is a weak intensity correlation (under 0.3) between frequency of trainings and “Learned and improved customer objections solving techniques” and “Learned and improved sales approach based on assisting customer to make solution for his needs” and very weak correlation with statement “Learned and improved product presentation skills” (r=0.157).

From the all of the analyses above it is evident that respondents that have attended larger number of sales trainings consider them helpful at boosting their level of sales knowledge and skills. Therefore hypothesis H2 is valid.

H3: Management in Croatian companies does not show enough interest for a real application of sales trainings which makes sales trainings less effective in a business practice.

The hypothesis will be tested through some of the variables from Level 3 – behavior statements and questions connected with specifics of sales expectations in a respondent’s company. As seen from the graph 2 from the level 3 the lowest scores had statements regarding behavior of sales managers in application of the learned sales skills; “My superiors encourage me to apply new knowledge and skills” (M=3.29), “My company formally follows and periodically evaluate my sales performance” (M=3.35), and “My company financially rewards good sales results” (M=3.38). ANOVA test showed statistically significant differences between certain groups of respondents:

- Respondents on sales support positions have better average scores on variables “My company financially rewards good sales results” and “Overall, in my company there is a real possibility of application of sales knowledge and skills that have been subject of trainings” than respondents on different sales jobs;
- Respondents from larger companies have statistically significantly higher scores than respondents from smaller companies for statements: “After sales training I am interested to try in practice new knowledge and skills”, “I adjust or change my work with customers in accordance with useful suggestions from the training” and “My company formally follows and periodically evaluate my sales performance”.
- Employees of foreign owned companies evaluate almost all variables from level 3 with higher score than employees of domestically owned companies.
Question regarding sales and market conditions and pressures also provides an important insight into the behavior of companies regarding interest in application of sales trainings. Table 9 shows that pressure of management for sales results is very high ($M=4.38$) while at the same time companies are not willing to invest into sales trainings and provide their employees with the tools to reach more ambitious results.

Table 9. Average score on specifics of sales conditions in your company.

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Company oriented on</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Domestic market</td>
</tr>
<tr>
<td>Pressure for increasing sales results is growing higher every year.</td>
<td>4.38</td>
<td>4.41</td>
</tr>
<tr>
<td>My personal sales quotas are each year harder to reach.</td>
<td>3.74</td>
<td>3.89</td>
</tr>
<tr>
<td>Number of sales trainings in my company is growing each year.</td>
<td>2.82</td>
<td>2.72</td>
</tr>
<tr>
<td>Because of harder market conditions my company invests more in developing competencies of its employees.</td>
<td>2.93</td>
<td>2.93</td>
</tr>
</tbody>
</table>

In order to test for validity of the hypothesis part of the level 3 statements regarding activities of management and company for encouraging application of sales skills and variables from the question regarding sales conditions and environment have been displayed on graph 4.

Graph 4. An average score of relevant variables regarding hypothesis 3

From the graph above it is possible to conclude that management and corporate behavior regarding encouragement of application of new sales skills are scored low comparing with the other variables in level 3. At the same time sales environment and management’s demand for sales results are increasing while companies are not prepared to invest into more sales trainings but rather decrease frequencies because of budget restraints brought about by economic crisis in Croatia. From the obtained research results hypothesis H3 is accepted.
7. CONCLUSION

Main research findings have been focused on connecting sales trainings and educations with sales competencies that are directly responsible for the sales results. Primary research showed some interesting and unexpected results. It appears that there are no direct statistical connection between intensity of sales trainings and sales results. It seems that sales trainings participants had the least help from the trainings in finding a new customers while they recognized at the same time that trainings did help them with their sales work. Across four levels of performance there is a decrease in score as evaluation progresses toward higher levels. It is easier for trainers to get positive reactions from the participants than the actual sales results. Participants did learn new sales knowledge and skills and they seem eager to apply it in everyday work. However, there is an apparent lack of support in their organizations regarding stimulation and application of new sales knowledge and skills. At the same time companies expect from their sales personnel higher sales results while not providing adequate trainings or encouragement of its application into the business practice. Obviously, there is a gap that adversely affects effectiveness of sales trainings. Suggestion for managers based on this findings is that there is a profound need that higher management understand importance of trainings and provides the managerial support needed for its successful application into the business practice. On the other hand, sales trainers have to do better research regarding their customer’s needs as some respondents did have problems with getting desired results from the trainings, such as inability to “find a new customers as a result of sales training”, and specific “adjustment of sales trainings to the needs of participants” – both statements received a well bellow average score. Respondents that participated in more than 5 trainings on average gave higher scores, that is their sales performance evaluation as a result of training is a bit higher comparing to the participants of the fewer sales trainings. Furthermore, sales trainings provided by professional consultants had a stronger positive impact on sales results than any other source of sales training. However, those are the most expensive. Research also showed that there are differences between domestic and foreign companies and large and small. Foreign and large companies are better structured for sales trainings, have better understanding and application and therefore better results than smaller and domestically owned companies. Taking into consideration research results it is obvious that field of development of sales personnel through educations and trainings is quite challenging and complex. There are numerous variables that impact sales performance and some of those could be positively impacted by sales trainings. Sales consultants priority are to develop and deliver custom made effective trainings and organizations priority should be to provide positive organizational attitudes toward application of new sales skills. Only then will sales trainings show its full potential and truly add value for its participants.

Suggestion and challenge for the future research is to connect Kirpatrick’s four level performance evaluation model with quantification measures in order to calculate return on investment in sales trainings therefore providing full answer for ever lasting cost-benefits question regarding exact value of sales educations and trainings.

LITERATURE


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ANALYSIS OF MOTIVES OF GENERATION Y WINE CONSUMERS IN CROATIA
IRENA PANDŽA BAJŠ
SANJA MORALIĆ

ABSTRACT
Purpose of this paper is to identify the main wine consumption motives among generation Y in Croatia. Generation Y (Millennial) has become very interesting for markets, researchers and advertisers because of their proportion, their financial power and consumer lifestyle. Researches about the generation Y consumption have brought a lot of benefits for companies in order to awake and understand needs and aspirations of generation Y consumers and also to adjust marketing strategies appropriate to this generation. Wine marketing nowadays is globally developed, but in Croatia it is still at its beginning. Wine culture and wine industry in Croatia still have not used their potentials in the way they could, so it is very important for wine marketing to make strong influence on young adults by using appropriate strategies. Properly understanding of consumers’ needs, optimum segmentation and appropriate marketing activities are the keys of successful wine marketing. The results of primary research has shown that key motivator of wine consumption among Croatian generation Y is food i.e. complementarities of food and wine. Self-expression does not show any impact on wine consumption among Croatian Millennial. Those results could be useful for wine industries and for developing their marketing strategies related to young adult generation Y.

KEY WORDS: generation Y, wine consumption, motives.

1. INTRODUCTION
Wine cultivation, as a part of food industry, represents a primary economic sector. Apart from being foodstuff, wine also has a symbolic mean as a beverage consumed among all generations. Consumer demands for wine are continuously growing. Market index indicates the continued growth of demand for wine as well as positioning wine in a category of luxury products in the near future (Ribica International Limited, 2012). Wine industry is faced with challenges such as discovering invisible consumer needs and desires, attracting new segments of consumers, creating new and innovative strategies as well as adoption of new marketing paradigms. Properly understanding of consumers’ needs and motives, optimum segmentation and appropriate marketing activities are the keys of successful wine marketing.

In a lot of industries market segmentation nowadays is based on generational differences of consumers’ lifestyles and characteristics. Mannheim (1923) described generational cohort as the group of individuals grown under the same temporal, social and historical conditions that are characterized with the similar values, attitudes, characteristics, lifestyles and behavior (Loroz & Helgeson, 2013, Wolf et al., 2005). Every generation is under the influence of external circumstances that form common value system different from the other generational cohorts.

Considering the fact that wine consumption is not motivated just by the habit but also by the tradition, complementarities with food, need for relaxation and socialization, expressing social status etc., it is of huge importance for wine industry to understand consumer motivation and differences among generations. Generation Y is the most important consumers’ segment on the market because of their financial power and consumers’ lifestyle. In accordance to this, the main goal of this research is to analyze and explore motives of wine consumption among generation Y in Croatia. The results of this research could be useful for wine industry in efforts to adopting and creating optimal way of developing wine marketing in Croatia.

2. LITERATURE REVIEW
2.1. Motives of consumption
Consumption is always enhanced by motives. Two main groups of motives are rational or cognitive motives and emotional or affective motives. Consumers are often motivated by the both rational and emotional motives at the same time.

Theoreticians consider human behavior as a result of inner needs and external stimulators. There are various classifications of human motives elaborated by many different authors. Edward Tauber is one of the most important theoreticians that observed human motivation. His main hypothesis explains that human behavior is motivated by various psychological...
and social needs, apart these needs that are related to the product. Tauber considered that, in effort to analyze human motives, it is essential to evaluate satisfaction that consumer achieves through consumption process (Westbrook & Black, 1985). The experience of consumer satisfaction has importance because it is the main indicator of the strength of some motive. Tauber identified personal and social motives that influence on human behavior (Buttle, 1992).

**Picture 1. Classification of personal motives of consumption (Edward Tauber, 1972)**

- customer role  
- learning about trends  
- self-accomplishment  
- escape from daily routine  
- physical activity  
- sensory stimulation


**Picture 2. Classification of social motives of consumption (Edward Tauber, 1972)**

- social interaction outside home  
- communication with people of common interests  
- joining with referent groups  
- joy of negotiation and bargaining  
- affirmation of social status


Some researches show that almost 39% of consumption in department stores, 62% of consumption in discount stores (Prasad, 1975) and 60-70% of consumption in supermarkets represent impulsive consumption (Gultekin & Ozer, 2012). Impulsive consumption is rarely planed and mostly spontaneous. It represents the situation in which consumers emotions are dominating over its ratio. With this way of consumption, consumers often satisfy well their hedonic needs (Piron, 1991; Rook, 1987; Hausman, 2000 in: Gultekin & Ozer, 2012). Hedonic needs such as need for joy, pleasure and sensual delights influence on creating hedonic motives. These motives mostly are triggers of impulsive consumption.

Arnold & Reynolds (2003) have elaborated classification of types of consumption and motives, which helps to understand better why different consumers act differently in consumption situation. Motive of consumption can be: company, adventure, satisfaction or accomplishment, value, idea and consumer role (Arnold & Reynolds, 2003 in: Gultekin & Ozer, 2012). Motives such as adventure, idea or satisfaction mostly represent triggers of impulsive consumption, while motives such as value, company or consumer role do not influence on impulsive consumption.

Motives of consumption differ among consumers depending also on their cultural background and society they come from. Consumers which share different socio-cultural characteristics often express the different way of thinking, experiencing and behaving. These differences often result with different self-construction. Authors Markus & Kitayama (1991) consider that self-construction or perceiving self-individuality comes from the influence of value system in which one was born and grow up (Wajda et al., 2007). Thereafter, Western culture often fosters individual values and self-importance among people, as opposed to the Eastern culture which considers community and orientation toward society as the center of human values.

Instincts for self-regulation and self-evaluation represent a part of every human being. Self-regulation and self-evaluation come from human desire for creating positive personality. Many authors mention human desire for creating positive self-evaluation (Tesser, 1988; Tesser, Millar & Moore, 1988; Tesser & Cornell, 1991; Sujan, 1995). Motives that encourage process of self-evaluation are accuracy, personal growth and achievement (Wajda et al., 2007). These psychological motives are very important because of their influence on consumer behavior, consumer preferences and consumption decision. Results of the research, conducted by authors Wajda et al. (2007), shows different motives of consumption among consumers in USA and China. The most dominating motive among Chinese consumers during self-evaluation process is accuracy, instead of personal achievement which is the most influenced motive among American consumers. These invisible motives that come out of cultural differences between Eastern and Western culture have a huge impact on consumer behavior.
2.2. Specificity of consumption motives of generation Y

Generation Y, also known as Millennial generation, is especially powerful and active group of young consumers. Huge consumer power of Millennials awakes special interest among researchers and marketing professionals in their efforts to discover and understand motives of consumption among generation Y.

There are many factors that cause everyday consumption among Millennials. Some of them are (Trends Magazine, 2012):
- Need for functional products
- Need for joyful experience in consumption
- Need for decreasing risk of consumption

Basic motives of consumption among generation Y are various and dependent on many factors. Therefore, it is interesting to examine motives that are specific for the lifestyle of generation Y. One of such motives is absolutely related to status consumption. Authors Eastman & Liu (2012) say that generation Y consumers are much more disposed toward status consumption than all the other previous generations (Eastman et al., 2012). Eastman et al. (2012) defines status consumption as “motivational process by which one creates its social position through conspicuous consumption of products representing social status for the society.” It is important to note that status consumption is enhanced by the irrational motives.

Generation Y try to accomplish symbolic utility and satisfy its emotional and social needs, through status consumption. People express their own personality toward society, especially toward referential groups, by consummating status products. Authors Meister & Willyerd (2010) noted that high level of status consumption among Millennials is motivated by their huge desire for success (Eastman et al., 2012). Authors Eng & Bogaert (2010) say that status consumption is much more influenced by hedonic motives, than by the utility (Eastman et al., 2012). Millennial generation attempts to impress the society so it is reasonable its affinity to status consumption and brands.

Motive of self-expression among generation Y is seen in its perception of brands. Generation Y consumers see the brands as a reflection of their own personality. They do not seek only functional use in products anymore (Havas Worldwide, 2011). Except the need of expressing their personality through brands, Millennials are also motivated by the loyalty toward brands, in their consumption (Havas Worldwide, 2011). More than 50% of Millennial generation across the world agrees with this fact (Havas Worldwide, 2011). Loyalty toward brand is important to generation Y because it increases personalization with brand and creates consumption security.

Generation Y is rationally (Martin & Turley, 2004) and socially motivated (Hewlett et al., 2009) when it comes to consumption in trade centers (Eastman et al., 2012). Apart the products that fulfill their emotional needs, Millennials also prefer products that care about the environment and human rights (Havas Worldwide, 2011).

It is hard to make general conclusions about motives of consumptions among generation Y because the members of this generation are in age range of 14 to 37 years. The youngest members of generation Y are teenagers, passing through the process of consumer socialization and seeking for their own consumer identity which includes independence, separation from parents, making their own consumer decisions etc. It is interesting to take a look on the specific motives of consumption among younger members of generation Y that differ from the older members of this generation. The results of the research, made by Noble et al. (2008), among Millennial generation in the USA, show that freedom and seeking for own identity are the main social implications responsible for motives of consumption. These implications arise from socialization theory. According to socialization theory, consumer socialization is a process in which young people adopt skills, knowledge and attitudes important for their functioning in the role of consumer (Ward, 1974 in: Noble et al., 2008).

Motives of consumption among youngest members of generation Y, according to authors Noble et al. (2008) are:
- Self-affirmation - consuming brands that enables a consumer to differentiate by its personality
- Associating with brand - affirmation of their personality through the brands consumption
- Following trends - consuming brands that enables a consumer to show and affirm its knowledge about trends, novelties and fashion to the society
- Seeking for the value - consumers tend to make the optimal decisions not just about price and quality, but also about their future consumption
- Pleasure of owning or consuming brand of product - consumers feel pleasure and satisfaction of owning or consuming brands they are loyalty to
2.3. **Consumption of wine among generation Y**

Total consumption of wine among generation Y is smaller than the consumption of other alcohol beverages, but it increases during the years (Melo et al., 2010 in: Kadić-Maglajlić & Dlačić, 2012). Consumption of wine among young generation increases because of the active lifestyle and more consumption of food and beverages in the public places. In accordance with its urban and relaxed lifestyle, generation Y consumers consume wine often in public places - bars, cafes, restaurants, etc. According to Thach & Olsen, (2006) the most common situations associated with the consumption of wine among the members of generation Y are: dinners and lunches, weddings, special occasions, business events, family meeting and other. The other category includes situations such as concerts, parties, wine tasting, art events, social events, holidays and similar.

Concern for health also influenced on increasing interest for wine among young generation. Millennials consider the wine as a beverage that is suitable for relaxation and meetings with family or friends and it complements good with the food. Some of them still consider wine as little bit elite, pretentious drink incompatible with their needs and desires (Thach & Olsen, 2006). When it comes to the preferences of wine sorts, the most of young consumers prefer red wines (Thach & Olsen, 2006). Results of Thach & Olsen research show that major part of young consumers prefers red wine, such as *Merlot* and *Zinfandel*, because of their smoothness, fruity taste and complementarity with food. Minor part of consumers prefers white wines, such as *Chardonnay*, *Pinot Gris* and *Traminer*, because of their fruity taste and sweetness. When choosing a brand of wine, members of Millennial generation pay attention on the creativity of label, huge percentage of alcohol and suitability for date or meeting (Qenani-Petrela et al., 2007).

3. **RESEARCH OF WINE CONSUMPTION MOTIVES AMONG GENERATION Y IN CROATIA**

Wine is still not the most popular beverage in Croatia. The most popular beverage in Croatia, especially for the young adults, is beer that is background symbol of many social events. Average quantity of wine consumption in Croatia, based on national balance of productivity and consumption, is approximately 28 L/citizen what is nearly the same amount as in the other countries of European Union. Yearly average of wine consumption per household in Croatia is approx. 10,1L (www.dzs.hr).

There is a continuous decrease of wine consumption per household in a last few years in Croatia (www.dzs.hr). Decrease of wine consumption partly is the result of the economic crisis and does not have necessary to indicate decrease of wine preferences. Wine consumption in Croatia is much less than in the other Mediterranean countries.

3.1. Research goals

The object of this research is consumption of wine among generation Y. The main research goal is to analyze basic motivators of wine consumption. Various motives drive the consumption of wine among young consumers. Many authors mention various types of motives of consumption; still some motives can be grouped into categories. Therefore, wine can be consumed for relaxations, affirmation of consumers’ status in society or playing some social role, consumers’ esthetic perception, associating with people or stimulating sociability, creating pleasure atmosphere or because of the tradition (Kadić Maglajlić & Dlačić, 2012).

Research goals are:
1. Analyzing motives of consumption of wine among generation Y
2. Identifying the most dominating motive that drives wine consumption among generation Y

Other research goals were to find out the frequency of wine consuming, the average quantity of wine consumed among young adults, places where wine is often consumed, occasions during which wine is consumed as well as the most often sources of information about wine.

Motives of wine consumption in Croatia were identified in relation to the demographic variables, like gender, age, education, profession, monthly income and marital status.
3.2. Research methodology

Research was conducted using the online questionnaire among examinees of 18-36. The questionnaire contains 20 closed questions; 9 of them was measured using the Likert scale for measuring degree of agreement with statement (1-absolutely disagree; 5-absolutely agree). Questions in questionnaire were based on attainable researches that were the basis of this research.

The main research objects are motives or reasons of wine consumption among generation Y in Croatia. Motives are classified into four categories:

- Self-expression
- Sociability
- Food
- Tradition

Motive of self-expression is measured by the consumption of wine based on consumers need and aspiration for social affirmation and expression of its own personality, affirmation of his maturity or social status, gaining reputation and appreciation from other, or achieving some other psychological benefit.

Motive of sociability is measured by the consumption of wine based on consumers need for socialization and connection with other people, creating pleasant and relaxed atmosphere or celebrating some special moments in a circle of important people.

Motive of food is measured by the consumption of wine based on the complementarity of food and wine and enrichment dinners drinking wine. Wine is irreplaceable part of a meal in many cultures and societies, especially with certain food like fish or seafood.

Motive of tradition is measured by the consumption of wine based on the habits of the land that consumer comes from, on the family tradition, or as a part of special rituals during ceremonies, holidays, celebrations etc. This motive is especially present in the rural environments where people cultivate wine and where cultivation and consumption of wine is a part of historical and traditional heritage.

For every independent factor or category of motive, there were offered several variables for measuring consumers' state. Likert scale (1-5 interval) was used for measuring where 1 represents consumers absolutely disagreement with the statement and 5 represents consumers absolutely agreement with the statement.

Assumption is that all the variables within one group must be highly correlated between themselves and non-correlated with the variables from the other groups. Every group of variables represents one factor or latent variable. Reliability of the measure scales was analyzed using the Cronbach Alpha coefficient (α), coefficient of the internal consistency. Reliability of synthetic variables was measured using the Cronbach Alpha coefficient and it was determined whether there were conditions for the formation of unique factors using a larger number of variables. It was determined whether between the selected variables exist interconnectivity in measuring the same phenomena. In order to achieve reliability of variables, value of the Cronbach Alpha coefficient should not be less than 0.7. Explorative factor analysis was used in order to analyze the structure of the variables and to determine common factors. On this way, data were reduced and common factors (sources of variations and co variations between the variables) were determined, but necessarily under the assumption of existence of the linear correlation between the variables and no existence correlation between the extracted factors. Factor loadings show the extent to which every single variable represents related factor.

3.3. Research results

Total of 165 examinees participated in the online survey.
- 90, 91% examinees drink wine: 9,09% don’t drink wine
- The major part of examinees are female (86:79)
- The major part of examinees are 26-30 years old (48,48%)
- The major part of examinees has a faculty education (64,85%)
- The major part of examinees is in work status (66,67%)
- The major part of examinees is not married (75,46%)
- The major part of examinees has a monthly income from 5000- 10000kn (32,72%)

The major part of examinees (44%) consume wine averagely 2 to 3 times monthly as well as the major part of them (24,67%) consume approximately 2 to 3 bottles of wine monthly or 2 to 5 bottles in 6 months (23,3%).

Table 1. Frequency and average quantity of consumed wine

<table>
<thead>
<tr>
<th>HOW OFTEN DO YOU CONSUME WINE</th>
<th>%</th>
<th>WHAT QUANTITY OF WINE DO YOU CONSUME</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Few times a year</td>
<td>26%</td>
<td>1 bottle or less during 6 months</td>
<td>21,33%</td>
</tr>
<tr>
<td>2 to 3 times per month</td>
<td>44%</td>
<td>2 to 5 bottles during 6 months</td>
<td>23,33%</td>
</tr>
<tr>
<td>2 to 3 times per week</td>
<td>28%</td>
<td>1 bottle per month</td>
<td>18,67%</td>
</tr>
<tr>
<td>Every day</td>
<td>2%</td>
<td>2 to 3 bottles per month</td>
<td>24,67%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1 bottle or more per week</td>
<td>12%</td>
</tr>
</tbody>
</table>

According to our results the primary information sources about wine are family and friends (37,5%), than secondly the Internet (21,79%). Small part of examinees (8,21%) get the information about wine through wine advertisements. This result corroborate the fact about huge importance of others opinion for generation Y as well as their need for taking recommendations and advices from more experience people. This result also proves their computer skills and awareness of Internet and modern technology in their lives.

Generation Y consumers in Croatia mostly buy wine in the shopping centers (36%), from private home wine producers (21%), in vine shops (19%), wine discounts (15%) and rarely in local shops (9%).

Generation Y consumers in Croatia mostly consume the wine in restaurants during the socialization with friends and family or business dinners, but on the other side they rarely consume wines on other public places as bars, cafes, clubs. There they prefer the other alcoholic drinks. Specificity of generation Y in Croatia is that they often consume wine from private home wine producers, so they also consume wine often at home.

Table 2 shows reliability and factor analysis of the motives of wine consumption. Reliability of the measure scales was analyzed using the Cronbach Alpha coefficient ($\alpha$); coefficient of the internal consistency. Variables representing motives of self-expression, sociability, food and tradition have satisfying level of reliability, higher than 70%. One variable of the motive of sociability was deleted from the analysis because it distorted Cronbach reliability. This variable is "When I want to celebrate and share my happiness with others." Explorative factor analysis was used in order to examine correlation between the variables and factors and also to extract common factors. Varimax rotation was used in order to get more simple structure of factor matrix and also because some variables were in correlation with the more other variables.

Table 2. Reliability and factor analysis of motives of wine consumption

<table>
<thead>
<tr>
<th>STATEMENTS</th>
<th>SELF-EXPRESSION</th>
<th>SOCIABILITY</th>
<th>FOOD</th>
<th>TRADITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>To be respected</td>
<td>0.876</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Because consuming wine shows my maturity</td>
<td>0.864</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To be prominent in a company</td>
<td>0.907</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Because wine increases sociability</td>
<td></td>
<td>0.668</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Because wine creates nice atmosphere</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Because a glass of wine goes well with</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>the dinner</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Because wine creates special atmosphere</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>during dinner time</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Because of the family tradition</td>
<td></td>
<td></td>
<td></td>
<td>0.697</td>
</tr>
<tr>
<td>Because of the habits in my land</td>
<td></td>
<td></td>
<td></td>
<td>0.936</td>
</tr>
<tr>
<td>As a part of rituals</td>
<td></td>
<td></td>
<td></td>
<td>0.585</td>
</tr>
</tbody>
</table>

| CRONBACH ALPHA COEFFICIENT              | 0.909           | 0.793       | 0.701 | 0.825     |
| ARITHMETIC MEAN (M)                     | 1, 32           | 2, 665      | 3, 66 | 2, 54     |
| STANDARD DEVIATION (SD)                 | 0,7792          | 1,3305      | 1,2409| 1,4146    |
The highest factor loading has the factor of self-expression. Then follow the factors of tradition, sociability and food. Variables of self-expression represent that factor most reliably. The highest arithmetic mean (M) which represents the most dominating motive of all. The lowest motive is self-expression with the smallest arithmetic mean (1.32). It can be concluded that consumers of generation Y in Croatia consume wine mostly because of the complementarity with food, while self-expression and affirmation of its style and maturity do not have impact on wine consumption. They do not consume wine to express their personality or social status. Despite their tendencies to assimilate with the society and make the impression on others, they do not consider wine as an indicator of social status, maturity or as an instrument for affirmation of their personalities. They do not perceive wine through its symbolic characteristics like prestige, elegance, high status or sophistication. This can be product of their inexperience in wine consumption as well as reflection of their easy-going lifestyle and different life approach, in comparison to other generations. Ignoring of symbolic characteristics of wine can also mean their hedonistic orientation toward life.

ANOVA method was used in order to analyze motives of wine consumption according to the demographic differences among examinees. The initiative assumption was that there exist differences in motives of wine consumption between male and female examinees, between younger and older examinees, between more educated and less educated examinees, between employed and unemployed examinees, and between examinees with higher income and those with lower income. But our results do not show any differences between the demographic variables, such as gender, age, education, profession, income and marital status, and motives of wine consumption. This result of the ANOVA method can guide us to the conclusion that probably the number of examinees was not sufficient for discovering the true relation between motives and demographic variables. Also this could be the result of unequal proportion of examinees within variables of education, profession, income and marital status. More than 50% of examinees is 26 to 30 years old, has a university degree, is employed and is not married. These data could significantly alter the reliability of the results.

In order to get more reliable results, the proportion of the examinees within all the demographic variables should be approximately the same.

4. CONCLUSION

The major motive of wine consumption among generation Y consumers in Croatia is complementarity of wine and food. Wine consumption during lunch time is a part of Croatian tradition especially in some regions, what can also influence on need for complementarity of wine and food. Self-expression does not have any impact on wine consumption and is the most irrelevant motive of all. Despite the fact saying generation Y cares a lot about their image and opinion of others around them, this characteristic is not imminent in wine consumption. Millennial generation consummates wine mostly at parties, meetings with friends and family, for increasing sociability and pleasure atmosphere. This generation do not use wine for representing or affirmation of their social status and personality. Wine industry should put accent on complementarity of food and wine and meeting with friends as the main light motives in their promotional activities. Wine industries should consider developing such marketing campaigns which young people could participate in and proactively contribute with their own ideas. Industries should actively use Internet tools for creating proactive communication with the young people. Business opportunities nowadays are offered through the active and knowledgeable use of social media services like Facebook, Instagram, Twitter etc. It is of huge importance for wine industries to create and develop interactive experience with the young consumers because they have the major potential to become greatest wine consumers in the near future. Perception of wine should be created as a beverage for young people, suitable for various occasions like meetings, parties or relaxation time; beverage that is natural, relaxed, fun and ecologically acceptable.

LITERATURE


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THE ANALYSIS OF THE CORRELATION BETWEEN EXPERIENCES ACQUIRED BY DOING SPORTS AND EXPERIENCES NEEDED FOR A SUCCESSFUL START UP
RINO MEDIĆ
ANA BAČIĆ
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ABSTRACT
Doing sports has, from the ancient times, been characterised as something that contributes to the general health of an individual. By developing sport and by bringing it to a higher level, one develops a range of experiences typical for athletes. Professional athletes invest years in their psychological and physical development and regardless of whether they are doing an individual or a team sport, they develop qualities and skills which can prove useful for their future careers. Since a professional career of an athlete has a time limit, depending on the sport they do, a high number of athletes decide to set up a business during or after their athletic career. Will experience they had acquired during their career be an advantage or a disadvantage?

This paper tries to establish the correlation between experiences acquired when doing sports professionally and experiences needed for setting up a successful start-up. The paper also tries to show to what extent the two are dependent on each other as well as to what extent they can be useful or harmful when launching a new business. For the purposes of this paper a secondary research was conducted, i.e. the available literature on entrepreneurs and athletes was analysed as well as on the qualities and skills typical for each of the professions. As the primary research a questionnaire was circulated to interview former athletes who set up their own businesses, successfully or unsuccessfully, and the gathered information was used as the basis for an analysis.

The paper also lists athletes who started a business successfully as well as those who did not succeed in doing so. Based on this, the paper tries to establish experiences which increase or decrease the chances for success and to find the correlation.

KEY WORDS: sport, entrepreneurship, a start-up, athletic experiences, entrepreneurial experiences.

1. INTRODUCTION – LITERATURE OVERVIEW

Doing sports has, from the ancient times, been characterised as something that contributes to the development of both physical and psychological abilities ("Mens sana in corpore sano"). Many papers have been written on this topic and the authors have been trying to establish what the effects of doing a sport are on physical and mental health of an individual. Many authors and many studies have established positive effects on doing a sport on the physical health of an individual. The British Heart Foundation National Centre for Physical Activity has, among other, published a document which shows positive effects that doing sports has on individuals ranging from lowering the risk of a range of cardiovascular disease to lowering the risk of diabetes and a number of other illnesses. Some authors also list positive effects sports have on mental health such as increased confidence, deceased stress levels and negative emotions as well as preservation of cognitive functions. However, as sports have developed to a higher level a substantial distinction between professional and amateur sports has become evident which has consequently led to a change in the impact it has on mental and physical health of an individual. Professional sports have become extremely demanding and the athletes are expected to be utterly dedicated and make huge efforts in daily training sessions. This raises a question as to how this high number of strenuous trainings affects health as well as the development of personal qualities and skills.

Some critics believe that doing sports professionally can lead to significant psychological difficulties later on in one’s life, especially if the achieved results are not adequate in relation to the efforts invested. Some authors quote a research according to which 71% of former drug addicts had intensely trained a sport in their childhood. The results of this research were quite unexpected and contrary to the prevailing belief of the time on the effects sports have on health and on the programmes marketed to the public. Some renowned physicians also believe that there is a high risk of drug dependencies among former drug addicts who had been trained a sport in their childhood.

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addition among individuals who had professionally done sports in youth. All these facts lead to the conclusion that there is another side of the coin when the effects of doing professional sports on health is in question and that we have to be careful when assessing the benefits gained by doing sports, especially professionally. Another important question is in what way and to what extent sport affects later development of physical health of an individual, their personality, qualities and skills.

Since a career of an athlete is a short-lived one, depending on which sport they do, many of them set up their own businesses after or even during their career. The question here is if the experience gained during their athletic career can be useful, and if yes, to what extent and how.

2. PERSONALITY AND PROFESSIONAL ATHLETES

An individual personality comprises a range of factors and is difficult to define precisely since it represents a broad term. One of the definitions which have lingered for many years claims that a personality is “a dynamic organisation of those psychic systems within an individual which determine one’s unique adaptation to their surrounding”. A similar but a simpler definition was given by Hollander when he claimed that a personality is a total sum of individual characteristics which make one unique. He also drafted the structure of an individual by dividing it into a psychic core, typical reactions and behaviours linked to the role and this personality structure was adapted to the psychology of sport by a sports psychologist Rainer Martens.

The influence of doing a sport on personality development was subject to study by many authors. According to some of them athletes differ from non-athletes in many traits, i.e. they are more independent, more objective and less anxious than non-athletes. Other research showed that athletes are extrovert with a low anxiety level. Some studies have shown a positive correlation between being active in a sport, extroversion and responsibility as well as a negative correlation between sport activity and neuroticism. These results vary depending on a sport and it is not possible to establish an unambiguous personality profile of an athlete.

However, it is not yet clear whether the differences between athletes and non-athletes are caused by the experience, i.e. learning or by the natural selection process in which an individual with certain personality traits is inclined to sport. Some research claim that doing sport before maturity has developing effects on personality. Therefore, one should not ignore the fact that doing sport can stimulate personality development and have a positive effect on developing business and entrepreneurial careers of former athletes.

3. ENTREPRENEURSHIP AND PROFESSIONAL ATHLETES

Entrepreneurship is defined in many different ways, but one of the best-known and oldest definitions claims that entrepreneurship plays a central role in the process of development because the entrepreneur is able to create conditions for productive technologies by expanding and discovering new markets, new products and new income sources. A simpler definition defines entrepreneurship as a process of creating something new with the presumption of risks and rewards. The word entrepreneurship itself comes from the French word entrepreneur which means „the one who undertakes, manages“ implying a person who does not wait for something to happen, but does it themselves.

What motivates athletes to undertake an enterprise and in what way their previous experience can be helpful in that regard. Professional athletic careers are time-limited and the majority of athletes do sports professionally between the age of 20 and 40. If we consider the time period of one’s working life which usually lasts until 60, there is a significant amount of time after the athletic career which former athletes try to use in different ways. One of the ways is to set up one’s own business. A number of athletes decide, after or even during their athletic career, to become entrepreneurs.

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7 Ibid, page 17.
8 Ibid, page 27.
9 Ibid, page 27.
10 Ibid, page 27.
more or less successfully. There is a number of sports where athletes try to use the advantages of having a previous
career in their new enterprise. Some of them use the capital they acquired during their professional career, some use
the knowledge and skills they acquired during their athletic career, some use acquaintances and the fact they are public
figures and some combine all of these when they launch their enterprise.

There is a range of personal qualities, motivational qualities and cognitive patterns which make up an entrepreneur
and are considered important for starting a business. A quality which is most interesting when former athletes as
entrepreneurs are in question is self-efficacy. Self-efficacy is defined as a belief of an individual that they have control
over actions which affect their life.14 Self-efficacy relates to the belief that we are capable of taking action and is one of
the self-regulatory processes of evaluation.15

Albert Bandura used self-efficacy to denote specific variables which affect performance and determine how long an in-
dividual would persist in case of obstacles and difficult experiences.16 According to this, the higher the self-efficacy, the
more intense the invested effort in case of obstacles and vice versa. Bandura thinks that self-efficacy is the core factor
of personal development and change.17 Several authors think self-efficacy is one of the main and most important traits
necessary for a successful start-up. Entrepreneurial self-efficacy is the belief in one’s own capability to set up a business
and has proved to be the most important individual predictor of later success.18 Higher entrepreneurial self-efficacy in-
cludes higher intrinsic motivation, higher investment, and stronger persistence when encountering obstacles.19 Athletes
work on themselves when doing a sport and develop self-efficacy necessary for success. Some of former athletes state
that self-efficacy is the key quality for being successful in sports. The Olympic winner Carl Lewis said: “If you don’t have
confidence, you’ll always find a way not to win”.20 Personal experience is considered to be the first and the strongest
source of self-efficacy.21 This is perhaps the most important connection between the athletic and the entrepreneurial
self-efficacy. Athletes find themselves in a kind of entrepreneurial experience during their athletic careers. Competitive
sports force them to strive to improve their performance in order to be more competitive in an uncertain environment.
They face their competition, success and failure. According to a research athletes who take part in competitive sports
develop entrepreneurial way of thinking – they feel more competitive, they set higher goals and are persistent in their
effort to achieve them.22 Moreover, in business surrounding athletes can learn that they have to work as hard as they
used to in the athletic one and their former success can be an additional motive.

4. RESEARCH

This paper uses a questionnaire as the basis for research and the following analysis. The questionnaire was drawn up so
as to find a correlation between the experiences gained by professional athletes and the experiences needed for setting
up a business. It is important to mention that this questionnaire did not measure traits or abilities but the respondents
self-assessed their traits and abilities as well as assessed to what extent their experience as athletes helped them in their
future entrepreneurial careers. Considering the particularity of the research and the test group, the small sample of only
38 respondents is understandable. Due to this, the results should be understood with some caution. In order to gain
precise results a larger research should be conducted with a higher number of respondents. 78% of the test group were
male and 22% were female. Regarding their qualifications, 21% of respondents had a high school diploma, 52% had a
university degree and 27% had a Master’s degree. A little more than a half of the total number of respondents had done
a team sport 57%, whilst the average duration of doing the sport was 15,7 years. The questionnaire used in this paper
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### Notes

therapy, Vol. 5., page 110.

15 Miljković Krečar, I., (2013) *Predicting Entrepreneurial Behavior by Bandura’s Self – efficacy theory*, Doctoral thesis, Faculty of Humanities and Social
Sciences, Zagreb, page 57.


17 Miljković Krečar, I., (2013) op. cit., page 58.

18 Ibid, page 60.

19 Ibid, page 60.

tics, page 18.


5. RESEARCH RESULTS

The table below shows the respondents’ self-assessment of how their athletic careers influenced the development of their business abilities.

**Table 1: Self-assessment of how athletic careers influenced the development of business abilities**

<table>
<thead>
<tr>
<th>Skill</th>
<th>10%</th>
<th>20%</th>
<th>30%</th>
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The highest number of respondents, almost 70%, thinks their athletic experience was significantly important for developing the skill of being goal-oriented. According to some research, goal-oriented athletes support the strategies for mastering tasks, they are directed according to own criteria and believe in making effort and acquiring skills in training. It is especially important to emphasize that when facing difficulties or failure they persist in their efforts and show desirable motivational behaviour. Since difficulties and potential failure are what entrepreneurs often face, it is not at all surprising that former athletes ranked this quality as the most important among qualities they developed while doing sports and which later helped them in their entrepreneurial activities.

Other two skills the respondents felt they acquired during their athletic careers are strategic thinking and team work. Since the vast majority of respondents did a team sport this result is not surprising. However, it is slightly surprising that 60% of respondents feel that while doing sport their ability to think strategically developed significantly. It is interesting that none of the respondents felt that they did not acquire any of the mentioned skills. Only an insignificant minority think that they did not learn almost anything about communication skills (3%) and negotiating (3%).

**Table 2: Self-assessment of how athletic careers influenced the development of entrepreneurial abilities**

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<th>Skill</th>
<th>10%</th>
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<th>70%</th>
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<td>Belief to control your own destiny</td>
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<td>Need for achievement</td>
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<td>Tolerance of uncertainty</td>
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was not helpful at all
was almost not helpful at all
was helpful moderately
was helpful a lot
was helpful significantly
The above table shows how the respondents self-assessed to what extent their athletic careers were useful in developing certain entrepreneurial qualities. Entrepreneurial qualities self-assessed by the respondents are taken from the paper “Construction and empirical verification of the entrepreneurial inclinations questionnaire” and are based on the Test for General Entrepreneurial Inclinations and Koh’s questionnaire.24

The vast majority of respondents (70%) think their athletic careers significantly helped develop their need for achievement. This result is interesting as compared to McClelland’s theory according to which the need for achievement is most important than in any of the different psychological entrepreneurship theories. 26 According to him the stronger need for achievement encourages an individual to set more challenging goals and use the skills and abilities needed to achieve them. He also claims that these individuals are more motivated to work more and take risks in order to achieve their aims. According to the results it is not surprising that the vast majority of respondents find that the need for achievement is a quality strongly developed by doing a sport and which later proved useful for launching an enterprise.

Almost 50% think that it also helped develop traits such as self-confidence and the readiness to take risks. Same as in the previous table none of the respondents think they did not develop any of the given traits. Almost 20% feel they did not learn almost anything about innovativeness. It is surprising that almost 10% think they did not at all develop qualities such as tolerance to uncertainty because uncertainty of result is one of the main characteristic of competitive sports. 26

According to the results the majority of respondents (74%) who did a sport for more than 20 years totally agree that this had a crucial impact on their future business success, while only 9% of respondents who did a sport for less than 10 years feels the same. This leads to the conclusion that doing a sport for a longer time has made the respondents realise the positive effects and its importance in their future business career.

As regards the influence of doing an individual sport on the future entrepreneurial success, the results are especially interesting. Even 42% of respondents who had done an individual sport totally agree that this had a significant influence on their later entrepreneurial success, while only 19% of the respondents who had done a team sport feel the same.

More than a half of respondents (54%) with the Master’s degree think that doing a sport significantly improved their business success while only 22% of respondents with high school degree think the same. This could lead to the conclusion that more educated respondents are more aware of the role of doing a sport had in their later business success. However, it is also possible that the respondents with the Master’s degree owe their better business results to the fact that they are better educated which they then attribute to having an athletic career before developing a business one.

Out of the total number of the respondents 63% of women totally agree that it is important to encourage professional athletes to continue their careers in the world of business, while only 32% of men think the same.

6. CONCLUSION

It could be concluded that the research results were as expected for what is meant by a sound mind in a sound body. The majority of respondents think that doing a sport helped them in their later business and entrepreneurial careers and the majority have a positive attitude towards the experience. It is important to emphasise that none of the respondents feel they did not learn anything from doing a sport. However, there are some differences in the respondents’ self-assessment of to what extent their athletic experience helped develop certain skills and consequently their future business enterprise.

Can experience gained by doing a sport be useful in starting up a business and if yes, to what extent and in what way, were the questions set at the beginning of this paper. The results show that the respondents think their athletic experience helped in their later business enterprise and they emphasised particular skills and traits they feel were especially acquired and proved useful later on. Furthermore, all the respondents think their athletic experience helped to a varying degree and what is especially important none of them think they learned nothing by doing a sport. In order to find a real connection between the traits and skills acquired by doing a sport and the traits and skills needed for starting a business it is necessary to conduct a more thorough research which would, instead of self-assessment of the respondents’ experience, measure these skills and traits and try to find a correlation between them. Therefore, further research on this interesting topic is recommended.

LITERATURE


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Appendix

QUESTIONNAIRE

This questionnaire is carried out for the purpose of scientific paper with the topic “The Analysis of the Correlation between Experiences Acquired by Doing Sports and Experiences Needed for a Successful Start Up”. The results of the questionnaire will be used for this purpose only and will not be used otherwise. The authors would like to thank you for your time.

Sex:                  M          Ž

Age:                 20 – 30     30 – 40      > 40

Education:  High school     University degree     Master’s degree   Doctoral degree

What sport did you do? _______________

How long did you do the sport? _____ years.

_______________________________________________________________________

Please mark on the scale from 1-5 to what extent you feel doing sport had taught you about the mentioned skills, which were later useful in your business career, 1-5 meaning:
1 = I have not learned anything
2 = I have not learned almost anything
3 = I learned moderately
4 = I learned a lot
5 = I learned significantly

Teamwork                                               1      2     3     4     5
Leadership                                               1      2     3     4     5
Organisation                                            1      2     3     4     5
Negotiating                                              1      2     3     4     5
Communication skills                             1      2     3     4     5
Strategic thinking                                1      2     3     4     5
Being goal-oriented 1      2     3     4     5
Please mark on the scale from 1 to 5 to what extent you think doing sports helped develop given traits that were helpful later in life, 1-5 meaning:
1 = was not helpful at all
2 = was almost not helpful at all
3 = was helpful moderately
4 = was helpful a lot
5 = was helpful significantly

<table>
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<th>Trait</th>
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<td>Need for independence</td>
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<td>Need for achievement</td>
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<td>Readiness to take risks</td>
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<td>Belief that one can control one's life</td>
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<td>Tolerance to uncertainty</td>
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Please chose the mark which best reflects your (dis)agreement with the following statements
- 2 = I totally disagree
- 1 = I mostly disagree
0 = I neither agree nor disagree
+ 1 = I mostly agree
+ 2 = I totally agree

In my opinion, the experience gained in doing sport influenced my business success. -2 -1 0 +1 +2

The experience I gained in doing sports was useful when starting a business enterprise, i.e. during my career in business -2 -1 0 +1 +2

I believe that the experience in doing sports had a crucial influence on my business success. -2 -1 0 +1 +2

My business career would have gone in the completely different direction if it had not been for my professional athletic career. -2 -1 0 +1 +2

I believe that the experience I gained by doing sports professionally made my progress in business impossible. -2 -1 0 +1 +2

I am convinced that having athletic experience significantly improved my business success. -2 -1 0 +1 +2

I believe that it is important to encourage professional athletes to continue their careers in the world of business -2 -1 0 +1 +2

The skills I acquired by doing sport professionally have proved to be very important in my business career. -2 -1 0 +1 +2

I believe I would have achieved equally good business results without the previous professional athletic career. -2 -1 0 +1 +2

The skills I acquired by doing sports have proved unuseful for my future career. -2 -1 0 +1 +2

The skills I acquired by doing sports have proved harmful for my future career. -2 -1 0 +1 +2
ROLE OF SOCIAL MEDIA NETWORKS AND CONTENT MARKETING IN INFORMAL EDUCATION OF EMPLOYEES: CASE OF CROATIAN BUSINESS ENTERPRISES

IVANA VRHOVSKI
PETRA SABLJAR
HRVOJE RATKIĆ

ABSTRACT
A great deal of research has been conducted worldwide on the habits of social media network users, not only in using social network websites for fun, but for educational and for the betterment of one’s work purposes. It is considered that sufficient research has not been conducted on the territory of Croatia. Dynamics of social media networks usage can be of help to business enterprises in the creation of internal and external strategies for educating employees or content positioning on the internet for the purpose of attracting new clients. Therefore, the focus of this research is the effect the social media networks have on employee education in small and medium business enterprises in Croatia.

Survey and interview results conducted on 350 respondents from 300 to 350 Croatian business enterprises about their habits of social media networks usage will be presented and explained further in this research. These results will point out the relationship of Croatian employees toward the quality, usability and usefulness of educational content published on social media networks, as well as the employee’s relationship toward the companies that published educational content they find and further use in their daily work. Based on the results of this research, suggestions for content marketing strategy on social media networks will be formed.

KEYWORDS: educational content, social media networks, content marketing, informal education, knowledge management.

1. INTRODUCTION
Today, knowledge is by far, the key element of progress and development in a extremely compeetitive environment in all aspects of human lives, primarily business environment. Companies, as well as their current and future employees, are well aware that the quality of expertise and business ‘know-how’ separate them from other competitors and enables them to achieve their set business goals and profit. In the 20th century a lot of attention and research was given to the role of knowledge in every day company life, as well as the importance of sharing gained knowledge among company employees. Sources of knowledge, except in companies, can even be found beyond: employees can gain new insights and knowledge through formal, non formal and informal ways. Informal ways for acquiring knowledge received a special interest thanks to the low resource investment in employees’ education.

Internet has a big role in informal education, given the fact that it enables users to share their knowledge and experience with other users throughout the world. Companies recognized the potential in creating free internet content for their target audience, content that can educate and help solve issues. By creating high-quality internet content a company can quickly become a market leader in its respective industry, and thus increase its image as well as profits. Free, available and always accessible content became a new form of company promotion, and in its distribution and propagation a great deal of credit goes to Social Media Networks. Content Marketing helps companies define which content and topics are most useful and desirable by their target audience, as well as when, how and where should the content be published. Content Marketing Strategy is still relatively unexplored in Croatia.

The habits of Croatia’s employees in discovering educative content via Social Media Networks is still largely unexplored. By exploring employee habits, valuable data can be acquired that can be used by companies in their content marketing strategy and knowledge management approaches.
2. THE ROLE OF PERSONAL DEVELOPMENT IN COMPANY KNOWLEDGE BUILDING

The importance of knowledge in company development and progress became a thesis of many theorists and experts in the field of company management in the second half of the 20th century. In its essence, knowledge plays an important role in company life given the fact that it is the foundation for company progress. Knowing the principals of knowledge building process can help companies in its development, management and optimal utilization. The most important role in forming and accumulating knowledge have the employees of the company, while the management has to create conditions and an environment in which knowledge can be formed, distributed and available for all Company’s employees. That is why it is necessary to understand knowledge in its core, why and how it is formed to better define and establish the processes in its management.

Knowledge is the basis for entrepreneurial growth by which a resource package that will enable a new successful business venture will be defined (Hisrich et al., 2001). Employee knowledge acquisition and appliance are key elements for the survival of a company on the market. In exploring knowledge and its cycle throughout an organization in 1997, Nonaka and Takeuchi presented two forms of knowledge: tacit and explicit (Joia & Lemos, 2009). Tacit knowledge is the one employees possess and is bound to context, while explicit knowledge is recorded or stored and is not bound by context (Ding et al., 2012). The goal of every company is to enable their employees to share their knowledge and experience with others so it would synergistically contribute to Company’s competitive value on the market.

Although knowledge can be gained at work itself, by which it becomes tacit, another method of knowledge building is beyond the Company’s environment itself - through different trainings, seminars, webinars, lectures and other educational methods. Based on previous researches and devised theories, it is concluded that explicit knowledge can be found beyond the Company’s environment - on the Internet, for example. Even though it can be found in various forms (text, graphical representation, video etc.), but lacking in context, it cannot be defined as tacit knowledge. (Joia & Lemos, 2009; Ding, et al., 2012).

Given the great importance knowledge plays for a company the need arose for its management. The role of knowledge management in a company is management of employee activities and their knowledge gain through motivation, leadership and support as well as creation of business environment that can support this (Gao et al., 2008). The goal of knowledge management is to secure the acquisition and flow of knowledge throughout the whole company, while preventing its outflow.

To achieve this, the company must positively encourage employees through factors like culture, business climate, database creation, authority management, knowledge assessment etc. (Joia & Lemos, 2009; Busch & Venkitachalam, 2011; Rasula et al., 2012). For a company to remain a constantly learning organization in which employees contribute to knowledge building as a whole, it must find other knowledge sources.

3. INFORMAL EDUCATION AS A MEAN OF SELF IMPROVEMENT

Long has formal education been considered main and most relevant knowledge source. However, given the constant need for knowledge building, other education concepts have rose to the challenge beside formal education. As research provided by EduCentar and MojPosao portal in 2010 suggest, only 7% of employers think that formal education provides a good work basis. Research conducted three years later states that 71% of employers think that additional, informal education is an important criteria in the selection of candidates for the job position (MojPosao, 2013).

In the 20th century non formal, informal and self-directed or self-thought education was recognized. A clear distinction between the education forms is clearly defined by the Adult Education Act in Croatia. Primary school, High school and University education is considered formal education in Croatia (Zakon o obrazovanju odraslih, pg. 1, 2010).

Non formal knowledge „(...) indicates organized educational processes directed on educating, preparing and instructing adults for work requirements, different social activities as well as personal development.” (Zakon o obrazovanju odraslih, pg. 1, 2010). The main difference from formal education is the time required to master the material that is determined by the curriculum or syllabus. According to research of EduCentar in 2010, 80% of employees referred to internationally recognized certification as the main source of non formal education.

Informal education „(...) indicates activities in which the adult accepts the opinions and positive values, as well as skills and insights from everyday experiences or other sources from his environment.” (Zakon o obrazovanju odraslih, pg. 1, 2010). That form of education takes place in everyday life, work place, society or purposely, but without a specific plan or program (European Commission, 2001).

An employee can develop through all three forms of education: formal, non formal and informal. Given that the nature of this knowledge is tacit, therefore the knowledge which an employee gained through experience and work, it is
necessary to transfer it to other employees of the company directly, by transforming it to explicit knowledge. Unlike formal and non-formal education that may require extensive investments in time and money, informal education is a category of education which is cost effective, and can provide desired results quickly (mastering of skills and competences in a limited amount of time).

Instead of libraries that were the main source of knowledge earlier, today the first choice is the Internet that provides a very fast search for desired information and far more content than any library can. The interaction on the internet can be passive (eg. reading) and active (eg. conversation) giving the Internet its form of a big company that enables knowledge transfer. Users on the Internet can learn in multiple ways: reading pages, blogs, articles, exchanging experiences on different web forums as well as on Social Media Networks (Wilmott, 2012).

4. SOCIAL MEDIA NETWORKS AS A MEDIA FOR PUBLISHING EDUCATIONAL CONTENT

The Internet has enabled us knowledge transfer via multiple channels: web pages, forums, chats, wikis, blogs, RSS feeds (really simple syndication) as well as through social media networks. A great deal of channels have evolved during the course of the last decade to the level where collaboration between users is strongly encouraged, generation of high quality content that is easy to use and accessible for viewing at all times is a rich experience. This new level of Internet is called Web 2.0 (O’Reilly, 2005) and is accepted throughout the world as an important improvement of the Internet and its value.

Web 2.0 has put its users to the forefront, enabling various skills and experiences to be transferred globally, thus creating the biggest database of explicit knowledge in the world. It is important to point out that this kind of communication is not just one-way but also two-way or multi-way communication: the users can exchange opinions and help build the knowledge base regardless of their location (whether being in the same organization or in different parts of the world). In order to promote conversation and a faster exchange of information, thus knowledge itself, social media networks were created.

According to data from 2012, 59,8% of households had Internet connection in Croatia, while 72,5% of households had Internet connection in the European Union (Majnarić, 2014). As far as social media networks are concerned, 26% of global population are using social media network sites (Kaleb, 2014), this percent has yet to be determined in Croatia. Even the correct number of Croatian users on various social media network sites is unknown. 1,6 million Facebook users were recorded in Croatia in 2012 (Croatia Week, 2014), while today 1,8 million users from Croatia can be targeted with Facebook advertisement application (Facebook, n.d.). In 2013 “Drap” agency stated that there are 51.968 Croatian users on Twitter, of which 25% are companies and different brands alone (Drap, 2013). LinkedIn has 333.368 users in Croatia (LinkedIn, n.d.), but data for other popular social media network sites like Google+, Printrest, Tumblr, StumbleUpon and YouTube are unknown.

Social media network sites have a great number of characteristics, but for the needs for this research only the characteristics for knowledge transfer will be described. They were introduced by Panahi, Watson and Partrige in 2012:

- **Content created by users** – users can create content on their own. If they create content from their personal experience, they then convert their tacit knowledge into explicit and share it with the rest of the users of a social network.
- **Communication between users** – Social media network sites enable all users to communicate their knowledge and experience onto other users directly with their participation in a particular topic.
- **Networking** - Social media network sites are excellent platforms where an individual or a company can profile himself as an expert of a distinct field with their presence and proactive work.
- **Multimedia orientation** – Social media network sites enable the exchange of various internet content - video, text, audio etc.
- **Ease of use** – the goal of every social media network site is to remain usable or improve usability for its users so it would remain attractive. Ease of use is very important, more so when information has to be shared or found quickly -only then will the users be satisfied.

Social networks not only enable companies to communicate faster with their fans,1 ie. targeted audience, but also enable companies to animate their audience in order to keep their attention and loyalty or persuade them into buying their products or services. The content of each publication or event announcement is very important, and in its creation and administration a new form of marketing discipline emerged: Content marketing. Content marketing is: “(...) a marketing technique of creating and distributing valuable, relevant and consistent content to attract and acquire a clearly defined audience – with the objective of driving profitable customer action.” (Content Marketing Institute, n.d.).

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1 Fans on social media network sites are individuals who have created their user profiles on those sites and who follow the specific type of brand on the social network.
In average 87.5% of B2B and B2C enterprises use social media network sites for content placement (Content Marketing Institute, 2013) which only stresses the importance and the role of social media network sites for content marketing. In regard to the usage of social media network sites in company promotions, as far as 88% of companies in Croatia use Facebook for promotion, followed by YouTube and Google+ with 23% and Twitter with 19% (Ping Pong, 2012).

The content can be presented visually, auditorily, textually or combined like webinars. Some of the most popular content are: texts on internet pages, blog articles, e-books, case studies, whitepapers, infographics, presentations, short videos, webinars and podcasts (Goliger & Hussain, 2013; Smith, 2013; Content Marketing Institute, 2013).

5. RESEARCH METHODOLOGY

The topic of this research are social media network sites used by Croatian employees in micro, small and medium business organizations for educational purposes. The primary goal of this research was to investigate the habits of employees in Croatian companies in using social media network sites for personal development. The secondary goal of this research was to determine the relationship between the employees and the quality and usability of educational content published on social media network sites as well as to determine the relationship between the employees as users of the published content and the companies whose educational content they find and study on social media network sites.

Research questions the authors wanted answers to were:
1. What are the habits of employees in Croatian companies in using social media network sites for personal education?
2. What is the relationship between the employees in Croatian companies toward the usability and quality of educational content published on social media network sites?
3. What is the relationship between employees in Croatian companies toward companies whose educational content they find and use on social media network sites?

Research has been conducted on micro, small and medium business enterprises in Croatia, given the fact that the number of employees in these enterprises against the whole number of employees in Croatia equaled to 67.04% in 2012, while the percent of employees in large business enterprises equaled 32.9% (CEPOR, 2013). All industries and sectors, as well as all counties of the Republic of Croatia, excluding business maturity, company number of employees and annual income were subjected by this research. Combined research methodology has been used in this research so that the topic could be approached from multiple angles.

Given the fact that no such research has been conducted in Croatia before, the authors conducted the primary research surveying participants by two questionnaires. The first survey took place from the 30th of March to 20th of April 2014. The survey has been completed by 350 employed individuals - including owners and employees, which was 100 more than first estimated. Additional open type questionnaire survey took place afterwards. An email with a link to the questionnaire was sent to all participants from the first survey who willingly gave their email addresses. A call to the survey was also posted in relevant groups on LinkedIn social network as well as by instant messaging targeted audience. A total of 120 individuals were contacted, and the authors received answers from 15 individuals. Secondary data sources were also used in this research deriving from various internet sources, databases and books.

6. REPRESENTATION AND INTERPRETATION OF RESEARCH RESULTS

The research conducted by the authors is first of its kind in Croatia, and the results provided by this research can be compared with the results of similar researches frequently conducted in the whole world to a certain degree, having in mind that market dynamics and trends are different from country to country. Research results can be used as a benchmark for further similar researches as well as in the process of developing content marketing plan or strategy.

The results have shown that 72% of respondents use social media network sites for educational purposes, while the other 28% do not. The reasons for not using social media network sites for educational purposes can be found in Chart 6.1. The chart shows that the most common reason for not using social media network sites in educational purposes is the unsatisfactory content the respondents had found. Interesting enough, the second most common reason for not using social media network sites in educational purposes is the respondents unawareness that the educational content can be found there. We can come to a conclusion that the quality and usefulness of educational content and activities promoting educational content on social media network sites have to be improved.
Respondents that do not use social media network sites for educational purposes were asked on what social media network site they tried to find educational content. Interestingly enough the respondents mostly used YouTube for finding educational content, a social media network site that is not the first choice of enterprises in Croatia for promotion (23% of companies), as well as LinkedIn that is only used by 7% of companies in Croatia for this purpose (PingPong, 2012). These results show that the companies should use Facebook, LinkedIn and YouTube for publishing quality educational content. Asked if they would use social media network sites if they knew that they could find educational content for their work, as high as 63% of respondents answered positively, 9% of them are not sure, and 28% of them said that they still wouldn’t use social media network sites.

The most frequently used social media network site in Croatia is Facebook, followed by LinkedIn and Twitter (Chart 6.2). It was not unexpected that Facebook, YouTube and LinkedIn were the most used social networks for finding educational content. Interestingly enough Google+ and Twitter are equally used for this purpose.

**Chart 6.1. Reasons for not using social media network sites for educational purposes**

<table>
<thead>
<tr>
<th>Reason</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Educational content cannot be found on the Internet for my line of work</td>
<td>30.61%</td>
</tr>
<tr>
<td>Found educational content is not of satisfactory quality and adequacy</td>
<td>23.47%</td>
</tr>
<tr>
<td>I did not know that I can find educational content even here</td>
<td>9.16%</td>
</tr>
<tr>
<td>Using sources beyond social media network sites</td>
<td>4.08%</td>
</tr>
<tr>
<td>Tried finding educational content on social media network sites but was not able to find it</td>
<td>15.31%</td>
</tr>
<tr>
<td>Other</td>
<td>17.55%</td>
</tr>
</tbody>
</table>

**Chart 6.2. Networks for finding educational content**
In the second questionnaire the respondents were asked what was the best social media network site for finding educational content in their own opinion and why. The majority of respondents choose LinkedIn because of its specialization in business networking, sharing various useful content, as well as enabling its users to communicate between themselves, follow companies and experts in distinct fields that transfer their own experience and knowledge online.

To better investigate the habits in finding educational content, the respondents were asked whether they search for educational content only when needed or in their own free time when they feel the need for further education. Interestingly enough, almost all of the respondents search for educational content in their free time as well as when it is needed. This information shows us that the respondents are well aware of the constant need for education. 35.63% of respondents said that they search for educational content when their work allows it, while 50.85% of respondents search for educational content in their free time mostly in night hours.

The highest percentage of social media networks usage for educational purposes is depicted in micro-enterprises, while the said percent is nearly equal in small and medium business enterprises. These results show us that employees in micro-enterprises actively search for educational content on social networks, which may happen as a result of their employers inability to further fund their education or simply the company not having enough experience and knowledge for employee internal education.

Sharing educational content with co-workers is one of the methods of sharing explicit knowledge inside the company. However, the research has shown that less than half of respondents have a habit of sharing their knowledge with colleagues or other employees of the company. This information shows us that the respondents prefer keeping knowledge for themselves and not sharing it any further.

Chart 6.3 shows the content form which the respondents prefer. It is especially interesting that the respondents give priority to articles on company web pages or other enterprise portals, while blog articles are on the 4th place. Also, as high as 54.67% of respondents prefer content written in English, which can be interpreted as an effect of unsatisfactory or unavailable content written in Croatian.

**Chart 6.3. Preferred content form**

A great majority of respondents stated that the quality of educational content of Croatian companies is low, ie. bad, a small number think that it is satisfactory, and as stated by one of the respondents - follows world trends. 20% of the respondents consider that the published content is basic and well-known, while two of the respondents couldn’t rate the quality of the found content. Most of the respondents read educational content written in foreign languages.
The respondents were asked whether they start “following” the company on social network sites when they find educational content on their channel. By “following” a company is meant to like a company on Facebook, to follow it on Tweeter, Google+ or LinkedIn etc. 35% of respondents stated that they start following a company, and 25% stated that they subscribe to a company newsletter or any other form of subscription to their work. A company that frequently publishes educational content wants to attract its targeted audience and later on start the sales process for potential buyers, and this research data shows that it is well worth the effort.

The respondents were asked if they would willingly buy a product or a service of a company that has a notable amount of published quality educational content (Chart 6.1).

**Chart 6.1. Readiness to buy in regard to educational content**

![Chart 6.1.](image)

The results show that publishing quality educational content substantially increases the chance of buying company’s services or products. By creating and publishing quality educational content the companies profile themselves as authority figures in their distinctive fields of work, and inspire trust by showing how their products or services can help others. Given that the nature of this content is normally free, the users appreciate it even more because they know they gained useful information and insights free of charge and remain loyal to the company that published it. As high as 95.63% of respondents think that Croatian business enterprises should publish educational content more frequently.

### 7. CONCLUSION

Publication of educational content is still a relatively new trend in Croatia, given the fact that its importance in not researched or discussed enough. The research results show us that employees in Croatian business enterprises have different habits in using social media network sites for finding educational content. Knowing these habits and reasons for not using social network sites for educational purposes enables various interest groups to create a plan of publishing educational content on various social networks.

These results can be used as guidelines for building a content marketing plan, but every company should further explore the habits of their own target audiences in using social media network sites so the promotion of educational content, and thus the promotion of the company itself would be optimal. Customizing the promotion for a new sale cycle can result not only in positioning the company as an industry leader, but also in profit gain which is a main business goal of every enterprise.

It would be interesting to conduct further research in the habits of sharing educational content between co-workers as well as to explore the reasons of storing it or not sharing the content further. This additional research would discover how the companies can better use social media networks not only for promotion, but for integration in the knowledge management process as well. Retaining educational content is not favorable for expanding knowledge inside the company nor for the company promotion, thus this research could answer the question on how to motivate content users to share it further.
This research is first of its kind conducted in Croatia, and the authors believe that it can be used not only by business enterprises in developing content management strategies, but also in further researches of social media networks usage for personal education. Companies that create and publish educational content on social networks can expect a greater reach and interaction with potential buyers and already loyal buyers than those companies who are passive in this trend.

LITERATURE

ABSTRACT
Innovations are the foundation of progress, especially innovations in fields with fast and dynamic cycles. The purpose of this paper is to give an overview of key elements in implementation of new marketing and communication channels strategy. The paper demonstrate that new and innovative marketing tools contribute to the overall success of small and medium-sized companies; these often have limited budgets and therefore have to be smarter in selecting the ways to use them.

The basis for this analysis is an overview of available literature. Diversity and relevance of the source matter for the overall quality of the work and its practical application. First, the present status of the tools and channels is analysed, then predictions are made about changes in a company after the introduction of the proposed changes in marketing and communication tools.

KEY WORDS: marketing strategy, communication channels, marketing channels, innovation, change management.

1. INTRODUCTION
The aim of this paper is to demonstrate that new and innovative marketing tools contribute to the success of small and medium-sized companies. Small and medium-sized companies often have to be smarter in selecting the optimum way of using marketing and communication channels, especially due to limited budgets. The company Media-Soft d.o.o., which creates client relationship management systems for pharmaceutical companies, has been selected for the purpose of this research.

Since Media-Soft operates in over 40 countries and competes with large foreign solution providers or so-called software companies from developed countries, it is necessary to identify the best channels and tools for communicating with existing clients. Compared to the competition, financial and time resources are limited. Therefore it is necessary to analyse all channels currently used and to suggest concrete improvements. Existing marketing and communication channels should be optimised accordingly and new integrated ones introduced for the said company. These strategies could then be applied to other, similar companies, but also to companies in other lines of business. The aim is also to achieve growth and improvement in business results, overall image and competitiveness by applying the chosen strategy. A part of all new improvements and suggestions is also a plan for the introduction of changes to integrated marketing communications as well as follow-up and analysis of the changes introduced.

The paper explores the issue of the company’s unexploited potential for growth and development, which may be reached through the introduction of new and better marketing and communication channels strategy. The best marketing and communication channels must be identified and selected as well as ways for their speedy and easy implementation.

The paper also deals with Media-Soft’s marketing and communication channels. The paper basically analyses the company with the aim of introducing changes with research focusing on the following changes: change of marketing strategy, organisational changes, change of communication channels, creation of new corporate identity and brand.
2. THEORETICAL FRAMEWORK FOR CHANGE MANAGEMENT AND INTEGRATED MARKETING COMMUNICATIONS

Change management relating to marketing and communication tools is a key factor in the creation of adequate marketing which will yield effective results and achievement of goals.

2.1. Change management in theory

The majority of modern marketing strategies are inefficient because they lack content difference, flexibility and commitment. Marketing as a business function must be the driving force because it is at the forefront of dealing with challenges and opportunities coming from the market, determining thereby the company’s course. Many companies today operate according to an established marketing strategy including target orientation, focus and differentiation. These terms indicate that company plans are strictly followed rather than modified. Focus indicates the companies do not change in the face of new market trends, while differentiation refers to exploiting the current competitive status. As opposed to an established marketing strategy, a so-called imaginative marketing strategy is proposed which has to be a driving force, visionary and innovative. The term driving force refers to situation when a status quo is challenged and when organisation turned such a status into it’s own favour. Visionary means using creativity in initiating future trends. The innovative component within a better marketing strategy has to shape innovations and new trends in order to create a competitive edge (Fisk, 2007).

Each organisation must adapt to new situations and market challenges in order to achieve set goals and ensure a competitive advantage. This process is called organisational change (Kotler et al., 2006) and is based on an eight-step model including: establishing a sense of urgency for change by the management, creating powerful guidelines for the organisation to be aware of its path, creating a vision of the ultimate goal, communicating the company vision to all stakeholders, motivating others to implement the vision and new guidelines, creating a plan for short-term wins in order to identify expectations, anchoring the change and seeking the need for new change in order to create an ever-learning organisation and prepare for a new approach to changes in the future.

When defining the objectives it is essential that companies do not accept too low goals because it can stop the growth potential. For example, today a large number of companies is captured inside existing behavior patterns and paralyzed by their own fears. This inhibits creative thinking, growth potential and blocks the realization of optimistic goals (Vaynerchuk, 2011).

2.2. Integrated marketing communications - theoretical approach

"Integrated marketing communications are defined as a concept in which a company carefully integrates and coordinates its many communication channels in order to convey a clear, consistent and attractive message about the organisation and its products” (Kotler et al., 2006, page 726). The author explains how correct use of integrated marketing communications creates added value in the company assuming that integrated marketing communications are implemented according to a comprehensive plan (2006). The idea of integrated marketing communications emerged after a shift from mass production and the approach that all customers are equal towards the approach that each customer and each target group matters. Consequently, companies must approach their target groups in the same way also when defining integrated marketing communications. The author further states that emergence of new media such as social networks, web sites etc. has led to companies increasingly using these media. What occurs is media targeting, meaning that for integrated marketing communications the company makes a narrow media choice. Possibly the greatest challenge will be segmentation of the true message which the company wants to convey through the right channel in order to maximise outreach to the customer (Kotler et al., 2006).

3. MEDIA-SOFT – CHANGING THE MARKETING STRATEGY

Media-Soft d.o.o. is an IT company doing business in a highly attractive and dynamic market niche related to Pharma CRM (Customer Relationship Management) software solutions for the pharmaceutical industry. Media-Soft’s most original and innovative solution is the Pharma CRM system called Sales Vision Pharma CRM, an internationally registered trademark. Today it is one of the leading European companies in pharmaceutical customer relationship management solutions with a strategy to expand to new markets and regions.
Media-Soft’s central marketing mantra can be described in two words: “Pharmacentric solutions”. The term was forged in 2013 from the previous mantra “Pharmacentric since 1996”. The mantra tries to emphasise that the company specialises directly in the pharmaceutical field, that its operations are not scattered and that it has a clearly defined market niche in which it aims to be a strong and leading company. The word **pharmacentric** is derived from the word client-centric and it was selected to additionally emphasise the company’s focussed specialisation in the pharmaceutical market niche. The word **solutions** fits because Media-Soft is involved in design and creation of solutions for the CRM and CLM (Customer Lifecycle Management) segment of the pharmaceutical industry. The slogan “Pharmacentric solutions” is very well accepted by potential and current Media-Soft customers.

### 3.1. Changes in marketing and communication channels

Media-Soft owes its good market position to the synergy of market-accepted products and efficient marketing which is able to select adequate marketing and communication channels in order to successfully convey its message to potential and current customers. In order to maximise the marketing message and image within integrated marketing communications, Media-Soft uses personal and non-personal communication channels with key channels being:

- a) Buzz marketing
- b) Pharmaceutical marketing and sales events
- c) Social networks
- d) Personal sales
- e) Direct marketing
- f) Own events
- g) Public relations
- h) Informative advertising.

The basis for effective channel of personal selling is a good story according to Seth Godin. The story must be true, consistent and credible. Good stories in personal selling must inspire confidence, cannot be too sensitive and must rely on logic (Godin, 2005).

### 3.2. Creating a new brand and corporate identity

Use of various messages can change and improve Media-Soft’s marketing image. To create, have and sustain the brand is a mission of every marketing department in the modern company. According to Wally Olins “Mark is ideally suited to an age of slogans and the global village” (Ollins, 2008, p. 12).

As additional messages the company will use the following three main messages in integrated marketing communications, throughout all channels: **Lego philosophy**, **manufactury** of Pharma CRM and CLM and **Are you one of us?** Each of the messages will be additionally explained through: definition of the message (what the message means and source of inspiration for implementing the message), aim of the message (what the message wants to be conveyed to existing and potential customers and what marketing image wants to be created), targeted messages (identification of the target group the message is intended for), message channels (identification of channels to be used for sending the message).

When writing email messages, they should be individualized, ie. as much as possible customized to every query and every customer. The bureaucratic style should be avoided and as much as possible used hearty style and tone of communication (Kobjoll, 2009).

**LEGO PHILOSOPHY**

Messages of the Lego philosophy have already been introduced at the Jacob Fleming Group event in Vienna (Image 1). Media-Soft purchased Lego figurines and printed the phrase *Build your own CRM* on them. The basic elements of the philosophy are as follows:
**Message definition**: The Lego bricks are one of the most popular products for kids and adults and are a synonym for the idea that everyone can build their own world by playing with Lego (Image 1). With the help of predefined drawings, Lego enables you to follow building instructions and construct the model you have purchased. Lego enables you also to construct a completely different world and improvise by constructing your own models.

**Image 1 Message**: The Lego Philosophy

![Design/Customise/Tailor/Flexible Your Pharma CRM+CLM](Image 1)

![The Only Manufacturer Of Pharma CRM/CLM](Image 1)

Source: Authors

**Message aim**: The Lego philosophy message wants to present Media-Soft as a company implementing Pharma CRM and CLM solutions in line with the customer’s needs and wishes. The company wants to show that through Media-Soft solutions anyone can create their own CRM and CLM in their own way, by combining various application modules and their own wishes into a unique homogeneous whole.

**Targeted messages**: The message will be addressed to all pharmaceutical companies and key persons who work there and are a part of the so-called Mozart and Curious segmentations.

**Marketing channels**: Social media networks, personal sales, internet marketing, buzz marketing, events, own events and public relations.

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**MANUFACTURY OF PHARMA CRM AND CLM**

The CRM manufactury message wants to show that Media-Soft implements personalised solutions with customers following the principle of manufactury quality.

**Message definition**: Aston Martin and IWC watch manufacturers are famous for producing their products in small series, putting their clients’ wishes first. The manufactury philosophy will be applied to Media-Soft. The new company identity based on the manufactury principle will be presented to the clients (Image 2).

**Message aim**: The Manufactury of CRM and CLM messages tries to shape Media-Soft’s identity as a company set to create fantastic products to pharmaceutical clients, but in a way that customers enjoy an individual approach and later personalised implementation. It tries to create an identity saying that each client’s wish and request can be implemented into Media-Soft’s CRM and CLM applications.

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1 Mozart, Curious and Bosses – code names for different segments
Image 2 Message: Manufacture of CRM and CLM

Targeted messages: the messages will be targeted at all pharmaceutical companies and persons working there and are a part of the so-called Mozart, Bosses and Curious segmentations.

Marketing channels: social media networks, personal sales, internet marketing, buzz marketing, events, own events and public relations.

ARE YOU ONE OF US?

This message tries to awaken curiosity among potential customers by revealing current users of Media-Soft solutions.

Message definition: The message Are you one of us? is designed with the objective to awaken curiosity among potential customers and to make them think about users of Media-Soft products (Image 3).

Message aim: The message is intended to provoke curiosity among potential customers because the illustration and the question Are you one of us? provides a clear answer to the question as to who are Media-Soft customers.

This message tries to awaken curiosity among potential customers by revealing current users of Media-Soft solutions.

Image 3 Message: Are you one of us?
4. CONCLUSION

This paper tries to create additional value in marketing and the overall business of Media-Soft through high-quality management of changes in the segment of marketing communications.

Some of the proposed marketing messages and channels, such as buzz marketing, have already been introduced and, through published photographs of implementation it resulted in increased interest among potential customers who eventually also introduced Media-Soft solutions. This is not the only case and it can be proven through other introduced channels, i.e. participation at the new Jacob Fleming Group event in Vienna, where initial contact was made which has resulted in concrete sales and acquisition of a new client. Thus the change and introduction of new marketing and communication channels have increased Media-Soft’s business results.²

Through the acquisition of new clients Media-Soft has solidified its position in the European CRM and CLM market, either by taking over the business from their competitors or by pharmaceutical companies opting for Media-Soft solutions. Media-Soft has acquired new clients at the expense of its competitors, which concretely proves that its competitiveness and market share have increased. Competitiveness increased also through new marketing channels, because the company has managed to implement its own solutions, unlike competitors who lost clients and consequently suffered negative financial effects. Competitiveness increased also due to indirect positive effects such as an increase in the value of intangible assets and knowledge gained through the introduction of new channels and new clients.

As the current central message “Pharmacentric solutions” has been well-accepted by the customers, reflected through their very positive feedback in the phases of initial contact and negotiations, with the introduction of three new accompanying messages the company will surely further improve its image. Further on, the Lego philosophy message has already been introduced at the Jacob Fleming Group event in Vienna, where customers promptly learned why Media-Soft differs. By acquiring new clients through events, it has been proven that there is a good balance between new messages and selected channels. It has been proven that selection of the right message is the right way to create consistency within the company and at the same time to create a trade mark the customers will trust. Thanks to the creation of an adequately introduced marketing image the company has been perceived positively by customers, which will in the long-run result in new potential customers.

Finally, with many of the new messages as the majority of new messages and marketing channels not yet implemented, one can expect further improvement of business results, competitiveness of Media-Soft’s image, since the company opted for messages which set them apart from the competition and for effective channels that provide a good basis for further growth and development. Such changes in marketing strategies can be followed or adopted by other companies in the same field, but also by other companies that are ready to introduce changes into their communication channels. It can be concluded that the business world of today evidently requires introducing permanent changes in the marketing strategies through the introduction of new channels of integrated marketing communication and the improvement of existing ones.

LITERATURE


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² according to internal Media-Soft d.o.o. documents
1. INTRODUCTION

This paper “The impact of implementing a quality control management system on the performance of Croatian companies” shows to what extent quality control is present in Croatian companies and how it contributes to cutting costs, i.e. increasing competitive advantage.

The companies which have implemented a quality control system, i.e. the international norm ISO 9001:2008 have been surveyed via a questionnaire, by email or telephone.

One of the first reasons for implementing the quality control system in companies is to maximize their performance. Providing the system is implemented and certified correctly, Croatian companies would enter foreign markets more easily as well as perform better in the domestic one. The paper also analyses to what extent cutting costs, and consequently increasing profits depends on the level to which the system is implemented.

The methods used in the research are the methods of analysis and synthesis as well as conducting a survey (by email and telephone). “The purpose of market research is obtaining information on which decision-making is based.” (Marušić, Vranešević. 2001).

2. QUALITY CONTROL SYSTEM

In the past two decades quality has placed itself in the central spot both in Europe and globally; from companies and public enterprises to non-profit organisations. The certification of quality control system according to the ISO 9000 range is regarded as the most important indicator of the increased quality level. A quality control system is a sum of prescribed regulations used for communicating with the employees in order to obtain a product or a service of highest quality.

Generally, quality is the value of a product or service, which complies with the specific requirements of the norm and which meets the needs of its customers in the most obvious way. The ISO 9001:2000 norm defines quality as “the level to which a group of particular characteristics meets the demand” (Kondić, 2002).

Since business is run in a world of fast changes, companies have to keep pace and follow trends in order to fight competition and survive. As its first priority quality sets meeting customer needs and by doing this it increases its competitive advantage. However, when competing in the market with the aim to keep and increase the market share, the question is how to meet customer needs and what the minimum standard a company needs to ensure is, in order to remain competitive.
Quality control was first introduced in the 1970s. Businesses which recognised the importance of quality control in the global market started to implement and certify their systems in order to meet the customer needs faster and better than their competitors. After the system had been implemented successfully, companies were certified which was the proof of product manufacturing or service providing and customer satisfaction. “all the companies which have obtained the certificate as the proof of the quality control system have at some point recognised the need for certification” (Drljača, 2002).

3. QUALITY COST

Implementing and certifying quality control systems in production or service providing requires certain expenses, which can have a positive or a negative effect on the general performance. The aim of this chapter is to define the role and importance of quality costs, the possibility of their allocation and eventually quality cost control in order to establish the amount of the quality cost.

3.1. The role and importance of quality costs

There is no single definition of quality expenses. Nevertheless, it can be concluded that the costs of quality are those costs which are caused by investing in achieving a certain quality level, as well as losses which are made when quality is not achieved. Quality costs are defined when improving a company’s performance and if mistakes are made during the implementation of the quality control system, the costs increase. Quality costs emerge for several reasons: when increasing the quality level of a product or a service, when the desired quality level has not been achieved. The costs become losses which would not have appeared if the desired quality level had been achieved.

Quality costs have several important characteristics: “they exist, they are usually hidden, they are a part of calculations but not as a separate and distinct part of the calculation, they are unknown, their structure is usually unknown, because of all the unknowns they are the most dangerous expense, quality costs can be an important indicator of quality, useful primarily to the management for making informed decisions” (Lažibat, 2009).

Aside from the mentioned characteristics, quality costs have their points of enter/entry points, based on which they are registered in every production process of the company. The points of enter/entry points are:

- **Expense groups** – consist of four expense groups which are defined according to the types of quality costs. The first group is TG1 (preventive costs), the second is TG2 which refers to the testing costs, the cost group TG3 consists of internal costs of (non)quality and the last group is TG4 which comprises the external (non)quality costs.

- **The place of the expense** – each company registers its costs according to the places they are made at. The expense places can be particular workplaces, i.e. parts of a company where expenses are registered.

- **Cost debiting** – “is allocating the quality expense to the one who caused the expense, and that is an activity, i.e. a process which uses the resources in order to reach a goal which is understood as the effect and the carrier of the expense in the process” (Drljača, 2004)

- **Accounting quality expenses** – information provided by the accounting department are the basis for managerial decision-making and a generator of the ideas for further quality improvement”(Rogošić, 2009).

- **Report on quality expenses** – should include high-quality information on quality in order to gain a realistic performance result of the company.

3.2. Division of quality expenses

According to the international norm ISO 9004-1:1994 quality expenses are divided into:

1. “internal quality expenses, which are made in performing activities in areas where it is necessary to achieve a particular level of quality” (Drljača, 2004)
2. “external non-quality expenses are those expenses which are made to prove or confirm quality demanded by the customers because of an objective quality evaluation” (Drljača, 2004).

“Internal quality expenses are divided into preventive quality expenses and expenses made due to (non)quality, as shown in figure 4.1.
a) Preventive quality expenses are expenses made because the required quality standards have not been met, i.e. “testing expenses are evaluation expenses (expenses of assessment, control and auditing to assess if the required quality has been maintained)” (Drljača, 2004).

b) Expenses due to (non)quality are:
   - Internal deviations – expenses made due to mistakes done in production
   - External expenses – made after a product or a service has been produced/provided.

After defining the basic division of quality expenses, a structural division of quality expenses can also be defined. The structural division of quality expenses is shown in Figure 4.1. where they are divided into expense groups (TG1, TG2, TG3 and TG4).

**Figure 4.1. Structural division of quality expenses**

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Expense group TG1 includes expenses made by taking preventive measures, expense group TG2 includes the expenses of testing, as shown in the figure. These two expense groups are a part of the structure of the expenses on quality. Expense group TG3 includes internal expenses, while the expense group TG4 includes external expenses, and the both groups are a part of the expenses due to (non)quality.

### 3.3. Control of quality expenses

Control of quality expenses is ensured by supervising all types of quality expenses in the quality control system. Control of quality expenses can be divided into the internal and the external environment. Product production can be supervised by the company itself, i.e. the producer and this is the internal environment. External environment are the end users, i.e. the customers who evaluate the product quality. Forming a system for monitoring quality expenses is a key factor for making companies more successful and for improving its performance. “it is a specific managerial concept which is orientated to a continuous performance improvement, teamwork, increased customer satisfaction and cost cutting” (Buble, 2006)

Quality expenses are registered in the accounting department. The accounting is done in such a way that the expenses have to be divided according to their type, and then, based on this, place of the quality expense has to be determined. Places of expense are important because of registering expenses, their allocation, reporting and debiting the expense. After dividing quality expenses and determining the place, the data can be processed and based on this a report on quality expenses can be written. In order to obtain a high-quality report, the data has to be processed in the appropriate way and delivered to the adequate departments. The aim of the report is to present important information on quality expenses to the users.

“The traditional way of managing expenses is to “forbid spending”, and this is the dominant way of managing costs in most transition countries, as opposed to the qualitative approach in which expenses are seen in the context of a synthesis of qualitative measures and data presented in quantities” (Lazibat i Matić, 2000). Since companies are run in times of ever stronger competition in domestic and global markets and customer demands are changing fast only those companies which manage to organise their activities in the way of minimal workloads with no mistakes will be able to survive on the market.
4. INTERPRETATION OF THE RESEARCH RESULTS

This chapter includes research results in Croatian companies. The sample and the methodology of research are defined and the results are presented and interpreted.

4.1. Research sample

Research sample are Croatian companies which have implemented and certified the quality control system according to the requirements of the international norm ISO 9001:2008. The companies have been chosen according to their activity and are based in different regions in the Republic of Croatia. Table 6.1 shows the structure of the chosen companies though different regions.

Table 6.1. Structure of the sample according to regions

<table>
<thead>
<tr>
<th>Regions</th>
<th>Structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zagreb (City of Zagreb, Zagreb County)</td>
<td>39%</td>
</tr>
<tr>
<td>Northern Croatia (counties: Krapina-Zagorje County, Varaždin County, Međimurje County, Koprivnica-Križevci County, Bjelovar-Bilogora County, Virovitica-Podravina County)</td>
<td>10%</td>
</tr>
<tr>
<td>Slavonia (counties: Osijek-Baranja, Slavonski Brod-Posavina, Vukovar-Srijem and Požega-Slavonia)</td>
<td>18%</td>
</tr>
<tr>
<td>Middle Croatia (counties: Lika-Senj, Karlovac i Sisak-Moslavina)</td>
<td>8%</td>
</tr>
<tr>
<td>Istria (Istria County)</td>
<td>7%</td>
</tr>
<tr>
<td>Primorje (Primorje-Gorski Kotar County)</td>
<td>4%</td>
</tr>
<tr>
<td>Dalmatia (Zadar, Šibenik-Knin, Split-Dalmatia, Dubrovnik-Neteriva)</td>
<td>14%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: Own research

As shown in the table 6.1. the highest number of the surveyed companies are located in Zagreb, even 39%, 10% are based in northern Croatia, 18% have been surveyed in Slavonia, and a little less than that, 14% have been surveyed in Dalmatia, 7% in Istria and 8% in middle Croatia, whilst only 4% respondents were from Primorje.

The survey was conducted on the sample of 119 companies with different activities. The highest number of the surveyed companies were trade businesses, i.e. 23. They are followed by construction companies with 19 respondents, processing industry is represented by 18 companies, transport and communication with 14 companies and 13 accounting and finance companies. The lowest number of respondents came from IT, agriculture and forestry (11), and only 10 came from tourism and hospitality industry. The pie chart 6.1 shows what percentage of surveyed companies accounts for which activity.

Chart 6.1. Activities of the surveyed companies
The research of the chosen companies was carried out during May, June and July 2012. The survey was conducted by telephone or email.

A structural questionnaire consisted of 24 mostly open questions. The highest percentage of the surveyed companies have implemented and certified the quality control system in the past ten years and 45% of them in 2008.

4.2. Research results

Through the open question as to why the company introduced the quality control system according to the international norm ISO 9001:2008 different answers were obtained as shown in the pie chart 6.2. Ensuring high quality work was the most common reason given (29%). The second reason was enhancing competitiveness by certifying quality control system (27%). Other reasons were expanding the market (20%), better image on the market (16%). The lowest number of respondents gave lower operating costs as the reason (8%).

**Chart 6.2. Reasons for implementing the quality control system according to the requirements of the international norm ISO 9001:2008**

![Pie chart showing reasons for implementing the quality control system](source)

Pie chart 6.3 shows the answers to the question whether the expenses have lowered their expenses after implementing the quality control system according to the requirements of the norm ISO 9001:2008. This question was answered by 102 of the surveyed companies (86%) 54 of which find that the expenses have remained the same. 23% of the respondents (27 companies) claim operating expenses have increased, whilst 19% (22 companies claimed that the expenses have decreased since the norm ISO 9001:2008 had been introduced.

**Chart 6.3. Operating expenses after introducing the quality control system according to the requirements of the international norm ISO 9001:2008**

![Pie chart showing operating expenses after implementing quality control system](source)
Pie chart 6.4. shows that the revenue in the surveyed companies had increased in 48% of the companies and 16% claim that it had increased significantly. 32% of respondents say that revenue had increased. After implementing the quality control system according to the requirements of the norm ISO 9001:2008 revenue had remained unchanged in 38% of the companies and 14% say that revenue had decreased.

**Chart 6.4.** Sales revenues after implementing the quality control system according to the requirements of the norm ISO 9001:2008

The first question about the reasons for implementing the system of quality control is logically followed by the next question about expanding the market. One of the reasons for implementing the quality control system according to the requirements of the norm ISO 9001:2008 is to expand the market and it was the third reason according to the survey. Pie chart 6.2. shows that that 20% see market expansion as the reason for implementing quality control system in companies. However, the pie chart 6.5 shows that 61% of the surveyed companies have actually expanded after implementing the quality control system according to the requirements of the norm ISO 9001:2008.

**Chart 6.5.** Market expansion after implementing the quality control system according to the requirements of the norm ISO 9001:2008

Measuring customer satisfaction is one of the most important indicators of how successful a company's performance is. 83% of the surveyed companies checks customer satisfaction. Pie chart 6.6 shows to what extent customers were satisfied after implementing the quality control system according to the requirements of the norm ISO 9001:2008.

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8 according to internal Media-Soft d.o.o. documents
As regards customer satisfaction, 9% of the surveyed companies are very satisfied and 38% are satisfied. Only 2% are dissatisfied while 17% cannot assess their level of satisfaction. 34% claim that customer satisfaction remained the same after implementing quality control system. Delivery speed, decreased number of complaints, fast information flow and delivering quality are the reasons for satisfaction. Reasons given by customers are above all quality, service and value.

Next questions enquire about the advantages and the disadvantages of implementing the quality control system according to the requirements of the norm ISO 9001:2008. The surveyed companies state that the advantages are: better and uniform product and service quality (32%), better position and competitiveness in the market (27%), higher customer satisfaction (24%), and increase in profit (10%) and decrease in expenses (7%).

After establishing the advantages gained by implementing the quality control system according to the requirements of the norm ISO 9001:2008, the disadvantages of implementing the system have also been established.
Chart 6.8. The disadvantages of implementing the quality control system according to the requirements of the norm ISO 9001:2008

The surveyed companies see the fear of change and responsibility (39%), exaggerated investment in the quality control system (28%), unnecessarily high number of controls (21%), changes in the structure of total expenses (12%) as the main disadvantages of implementing the quality control system according to the requirements of the norm ISO 9001:2008.

5. SUGGESTIONS FOR IMPROVING THE QUALITY CONTROL SYSTEM

By analysing the advantages and the disadvantages of the quality system implementation and certification according to the international norm ISO 9001:2008 a conclusion has been reached that market expansion and enhanced competitiveness are the main advantages of the quality control system. Moreover, uniformity of product quality and increased quality are a result of better operational organisation.

After analysing the advantages and the disadvantages of implementing and certifying the system suggested improvements are:

- Better explanation of the disadvantages of implementing the quality control system as well as managing and supervising them. Fear of change and responsibility, extensive investments in quality control system, unnecessarily high a number of controls and changes in the structure of the overall expenses.
- Investing in training managers to raise quality to a higher level. In the past decade the function of quality managers has expanded significantly in the developed world.
- After interpreting the results a suggestion is that the companies who do not have an alternative control system implement one.
- One of the suggestions for improving the quality control system according to the international norm ISO 9001:2008 is investing in employee training. For a company, employee satisfaction is highly important because only a motivated employee provides high quality work and efficiency.
6. CONCLUSION

After conducting the research a conclusion has been reached about to what extent quality control systems are implemented in Croatian companies. In the Republic of Croatia there are more and more companies every year which are increasing their awareness about quality of their operations, i.e. more and more companies are implementing quality control systems.

The research has shown that the surveyed companies which have implemented the quality control system according to the requirements of the international norm ISO 9001:2008 are more competitive, i.e. they hold a better position in the market. The results show that after implementing the norm 49% respondents have increased their market share in the domestic market and 12% have entered foreign markets.

The research has shown that the operational expenses do not decrease by implementing and certifying the quality control system according to the international norm ISO 9001:2008. However, the research has yielded a conclusion that the revenue in the majority of surveyed companies increased and the expenses remained the same which consequently means that profitability increased.

After analysing and interpreting the data a conclusion emerges that quality in the surveyed companies is becoming more important as far as the performance of Croatian companies is in question. Additional investments in the quality management systems are needed in order for the companies to survive in the global market which is strongly competitive. Quality and quality control system are a ticket to new markets and the answer to new market challenges.

LITERATURE


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COMPARISON OF WORD-OF-MOUTH AND VIRAL MARKETING CHANNELS IN MARKETING COMMUNICATION

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ABSTRACT

Companies have recognized the importance of viral marketing that has an increasing role in the marketing world because in this interactive process consumers may easily and quickly connect with companies and other consumers, they can exchange information about products and have complete freedom in the transfer of experiences. On the other hand, companies can directly approach to customers, get feedback regarding their satisfaction and thus create a long-term relationship with them. Regardless of the technology and the Internet that change the habits of consumers and strongly influence the buying decision, the effect of word-of-mouth and recommendations of people who are close to the customers will always be significant. The purpose of this paper is to compare the viral marketing and word-of-mouth, two very important marketing communication channels that function very similarly, but at the same time use different techniques to reach out the consumers. This paper attempts to compare the impact of viral marketing and word-of-mouth when making decisions about buying and to create awareness of the brand and strengthen the brand image through research.

The aim of this research is to study the similarities and differences between viral marketing and word-of-mouth and to compare these two communication channels watching their effectiveness, persuasiveness and importance in making decisions about buying. Furthermore, it will be shown how a message may be transferred both through viral marketing and word-of-mouth. Also, the effects of each communication channel will be elaborated. The study will also try to find out what exactly stimulates consumers to transfer a marketing message to others, and how it affects the various reference groups. In addition, it will be shown why it is important that companies are involved in the process of viral marketing, but also why it is important not to neglect recommendations and criticisms of consumers.

Primary research will be conducted through a questionnaire which will include questions about the influences on consumer’s decision to buy, why consumers are willing to recommend a particular product or brand, the persons who have an important influence on the purchasing decision, if they trust the recommendations and information they receive through social media, and what their opinion is about viral marketing campaigns.

KEY WORDS: Word-of-mouth, Marketing communication channels, Viral marketing.

1. INTRODUCTION

Owing to a fast development of technology nowadays, the term marketing acquires a completely different meaning. The power of the Internet is ever-increasing and it has a strong impact on consumers who are not only target groups of people to whom messages are aimed at but they are becoming active participants in marketing communication. Companies have recognized the importance of viral marketing as it has an increasing role in the world of marketing because consumers can be easily connected with companies and other consumers, they can exchange information about products and have a complete freedom in sharing their own experiences in this interactive world. On the other hand, companies may approach to consumers directly, get the feedback about their satisfaction and thus create a long-lasting relationship with consumers. Regardless of the technology and the Internet that change consumers’ habits and strongly affect purchasing decision process, word-of-mouth and recommendations of the people consumers are close to, will always be significant.

The paper deals with the problem of inadequate research and would compare the efficiency of two communication channels i.e. viral marketing and word-of-mouth.

The research focuses on identifying similarities and differences between viral marketing and word-of-mouth and the comparison of those two communication channels regarding their efficiency, persuasiveness and importance in the purchasing decision process. It has been assumed by the given hypothesis in the paper that viral marketing is more efficient in creating a brand image and brand awareness than word-of-mouth. However, word-of-mouth has a stronger impact on purchasing decision making regardless of the fast development of social media. It has also been assumed that the same factors motivate consumers to transfer the marketing message further, no matter if they use viral marketing or word-of-mouth.
2. THE CONCEPT OF VIRAL MARKETING

The term viral marketing was first mentioned by Steve Jurvetson and Tim Draper in 1997 when they used this term to describe a free e-mail service provided by Hotmail. Other authors define viral marketing as word-of-mouth via the Internet (Phelps et al., 2004), while other authors claim that real viral marketing differs from word-of-mouth. Pastore defines viral marketing as word-of-mouth by which consumers tell other consumers about a certain product or a service (Mallol, 2010). Kirby and Marsden believe that viral marketing is promotion of a company or its product by using persuasive messages designed to be spread from person to person online, whereas word-of-mouth has a role to make people speak positively about a company, product or service. (Mallol, 2010). Based on the various, analyzed definitions it can be concluded that the best way to define the viral marketing is as a marketing technique that uses pre-existing social networks so as to exponentially raise awareness about a brand, product or service in the process similar to the spread of viruses. Word-of-mouth is most efficiently encouraged by this process. Viral marketing uses various social media like blogs, forums, e-mail, community contents and social networks. Being present in social media provides companies with an opportunity to regularly and duly inform consumers about the values they offer, encouraging them to share information with other consumers. By well-designed strategy of using social media companies may provoke consumers’ positive reactions which can eventually result in strengthening the brand, raising brand awareness and introducing the brand to the global audience (Anonymous 1, 2011). Seth Godin believes that the biggest mistake companies make, when they decide to use viral marketing, is that they forget that viral idea is created for consumers and not for the marketing department of the company (Laycock, 2007). Such companies do not understand the very nature of viral marketing as consumers’ individual desires and motives play a key role in transferring a message. The key to the development of viral marketing campaign is the time spent to understand and to investigate into the factors which provoke passion and other emotions that will motivate consumers to transfer a marketing message to the people around them.

3. DEFINITION OF THE TERM WORD-OF-MOUTH MARKETING

Consumers have always shared experiences and attitudes about purchased products or services; therefore word-of-mouth is one of the oldest ways of information exchange. The term word-of-mouth marketing was first mentioned by Merton in 1968. He defined this concept as a process of personal influence in which interpersonal communication between the sender and a recipient can change recipient’s behaviour and attitudes. This influence of personal sources such as friends, relatives and colleagues plays a crucial part in the change of perception and attitudes (Magnolia, 2009). Word-of-mouth communication can be defined as a process during which a person informally influences the actions and attitudes of others, who can be either opinion seekers or opinion receivers. A key feature of word-of-mouth is being interpersonal and informal. It is carried out between two or more persons, none of whom represents commercial source so as to benefit directly from sales (Schiffman and Kanuk, 2004). There is a series of reasons that encourage word-of-mouth, and one of key reasons is consumers’ desire to transfer either positive or negative experience to other people thus influencing their pre-existing knowledge of a brand or a product. Unlike viral marketing, word-of-mouth has a limited scope because consumer retells their experience to five or maximum ten friends and then a circle of friends reduces to three or five persons. Consequently, a message quickly fades away and vanishes (Laycock, 2007). A negative aspect of word-of-mouth is, unlike viral marketing, that a message sent by the first consumer is not necessarily the same as the one that reaches the last consumer, which affects the authenticity of the message itself. Word-of-mouth has always been the most powerful marketing tool in the purchasing decision process. Marketing experts have just recently realised that the best way to increase sales is to encourage consumers to sell products themselves. In other words, marketing world is based around word-of-mouth, i.e. communication between consumers. Word-of-mouth is not just one of incidental consequences of good marketing. It is about stimulating the right people to speak positively and in the right way about a product of a certain company, and that is the most important thing the marketing experts of that company can do (Silverman, 2001).

4. EMPIRICAL RESEARCH

The sample in this research was comprised of 200 respondents who were anonymously surveyed online in the period of July-August 2014. The survey consisted of 18 questions.

Almost equal number of male and female population of Croatia participated in the survey, and regarding age group 27% of respondents belong to age group 18-23, and 48% belong to age group 24-30. This data is an important parameter as the respondents are young people, students and the working people who are most exposed to viral marketing and the Internet in general; in addition, they are big consumer group and have experience with marketing communication. Remaining respondents - 25% of them belong to age group 31-35.
First of all, it was necessary to determine how many respondents use social networks in a way that they have their profile on one of them or they use another person’s profile (Graph 1).

**Graph 1. Do you use social networks?**

![Graph showing social network usage](source)

The obtained results show that 47% of respondents have their profile on one social network, and 27% on one or more social networks. Only 6% of respondents use another person’s profile and 20% of them have no profile at the moment or they do not plan to create it in the future. However, the percentage of young people using social networks as a communication channel is very high so more attention should be paid to them in marketing i.e. promotional activities.

**Graph 2. Do you believe the information about brands and products you get from friends via social media?**

![Graph showing belief about social media recommendations](source)

According to the obtained results, (Graph 2), 40% of respondents sometimes believe the information and recommendations about the brands of products that they receive from their friends and acquaintances through social networks, and 35% of them mostly do not believe. Only 8% of respondents absolutely believe such information and recommendations, 14% of respondents mostly believe, while 3% of them do not believe at all, which indicates that they show caution regarding the way of using social networks.

Furthermore, the authors wanted to find out which are the most common sources the respondents use to obtain information and recommendations about certain brands of products.
Graph 3. Which are the most common sources you use to obtain information about certain brands of products?

![Graph 3](image)

According to the results shown in Graph 3, 46% of respondents have replied that they most often obtain such information and recommendations by word-of-mouth, 20% of them through social networks, 8% of them through forums, blogs, and the like, and 21% of respondents through mass media, 5% of respondents give their own reply, i.e. they obtain information through all stated media. It can be noticed that a high percentage of respondents use two analysed channels—social networks and word-of-mouth.

The next question, (Graph 4), dealt with the influence of information the respondents obtain by word-of-mouth from the persons close to them. Thus a conclusion could be made regarding which channel influences respondents the most. The obtained results are as expected. 85% of respondents said that the information obtained by word-of-mouth from persons they are close to has extremely great influence or great influence on them (mark 5 and 4).

Graph 4. What influence do the information get through word-of mouth?

![Graph 4](image)

Another important question in the survey referred to the influence the information obtained on social networks have on the respondents when making a decision on product purchase (Graph 5).
Graph 5. What is the influence of information which are sourced from social networks?

![Graph 5](image)

Source: Authors’ research

56% of respondents have replied that social networks have insignificant or no influence at all when making purchasing decision (mark 2 and 1), while only 14% (mark 4 and 5) of respondents have replied to trust the information and recommendations obtained through social networks. It is possible that the respondents are not aware of the influence that social networks have on them when making purchasing decision, or they may not want to admit that such influence exists as they want to believe that they have a complete control over their decisions.

It was interesting to find out why a consumer was discouraged to purchase a certain product, after they made a purchasing decision. The results are shown in Graph 6.

It is obvious that 54% of respondents believe that negative attitudes/experiences of the persons they are close to can make them change their purchasing decision. 3% of respondents gave their own answer and the most common one was that all given answers may change their purchasing decision.

Graph 6. What could discourage you to purchase a certain product if you

![Graph 6](image)

Source: Authors’ research

As expected, word-of-mouth, i.e. the information the respondents got from the persons close to them has a far-reaching influence on them, more than various comments that they read on social networks. Therefore, it can be concluded from their answers that word-of-mouth is more persuasive marketing tool than viral marketing.
The aim of the research was also to find out how much the respondents are active in sharing companies’ announcements with others on social networks, i.e. whether they actively participate in marketing communication carried out via the Internet. Some respondents are probably not aware that by clicking the option “Like it” and “Share” and making comments about certain announcements, pictures and videos on social networks they in fact participate in companies’ marketing communication and their activities.

When sharing various content with friends, colleagues and others the respondents do not think that by doing so they become the participants of viral marketing, but that they only want to share with their friends and acquaintances something they find either funny, instructive and/or consider as a warning. Graph 7 shows the results obtained.

**Graph 7.** Have you ever participated in a certain marketing activity through social networks?

![](chart.png)

**A great majority of respondents participated in certain marketing activity through social networks.** 42% of respondents participated in certain marketing activity by clicking the option “Like it” for certain marketing activities of a company, 15% of respondents used the option “Share” thus sharing certain announcements, pictures etc., and 19% of respondents made comments about the company’s activities on social networks, thus participating in a certain marketing activity. 20% of respondents think that they have never participated in such activities, while 4% of respondents gave their own answer, that is, they participated in a certain marketing activity in all the ways given.

Finally, the results given and other results of the research prove the tested hypothesis of the paper. In fact, by analysing the results it can be concluded that viral marketing is more efficient when creating a brand image and brand awareness. The reason for this is not that this technique is more persuasive than word-of-mouth, but the fact that viral marketing is very popular and widely spread. Word-of-mouth will more easily affect other people's opinions and attitudes, but a range of people influenced in this way is rather limited, whereas viral marketing has a much wider range so a marketing message can spread faster, more easily and further to other people.

Although viral marketing can influence a large number of people, word-of-mouth is still the most powerful tool regarding the influence on consumers’ purchasing decisions. Consumers find the information they obtain by word-of-mouth more confident than from the persons they know through social media. Therefore, it is not surprising that the information obtained this way has a stronger impact on purchasing decisions. Consumers have always participated in marketing communication, and their role increased even more with the development of the Internet and technology. Both word-of-mouth and viral marketing focus on consumers’ desire to be connected with others in order to share new information that they find relevant for the person they transfer information to.

No matter what the consumer’s intention is when transferring a marketing message, the consumer’s motives do not differ depending on a marketing tool used, but they depend solely on a consumer’s personality and the content of the message. So, regardless of great efficiency of viral marketing in raising brand awareness and enhancing a company’s image, there is no more powerful tool than word-of-mouth when making a purchasing decision. However, the authors believe that the influence of viral marketing will be getting stronger as the communication nowadays moves to a virtual world of the Internet.

By empirical research it was possible to find the similarities and differences between viral marketing and word-of-mouth. Those two marketing tools are basically very similar as they both have similar factors that motivate consumers...
to share information about a certain product. However, there is a significant difference when these tools are compared, and that is the way in which a certain message is transferred, which significantly affects the credibility and scope of the message. Although many authors believe that viral marketing is word-of-mouth via internet, it is less persuasive than word-of-mouth as consumers do not completely trust the announcements they read or see on the Internet. Such consumers’ attitude can be understood and one cannot expect that viral marketing will ever take a lead over word-of-mouth regarding message persuasiveness and its efficiency when consumers make their purchasing decision.

5. CONCLUSION

New technologies brought about key changes in marketing activities, and those changes can be noticed in all phases of marketing process which includes, besides other things, marketing communication. The Internet provides easier, faster and more efficient communication between companies and their consumers, and among consumers themselves. Companies are becoming more active on the Internet as they realise how powerful tool it is for transferring marketing message. As consumers spend more and more time on the Internet, companies are focusing on marketing activities on the Internet, which include viral marketing as well. But, there is an obstacle that companies have to overcome when using viral marketing and that is – consumers’ trust and passion.

On the other hand, no matter how technology developed and influenced a marketing world, there is something which has always been the most powerful persuasive tool for consumers, and that is word-of-mouth from persons they are close to. The roots of the impact of word-of-mouth derive from the interconnectedness of the individual and the group to which it belongs, and their need to share their insights with others. As word-of-mouth has great influence on consumers and their purchasing decisions, companies should pay more attention on consumers and on delivering the value expected by consumers. Otherwise, spread of consumers’ negative comments and criticism might affect existing and future customer base and finally affect the future business success.

When speaking about viral marketing and word-of-mouth, it is difficult to conclude whose tool is more efficient. On one hand viral marketing comprises a larger number of people, which means that some information may influence a larger number of consumers, unlike information transferred by word-of-mouth. However, the question is what kind of impact the information through viral marketing will produce on consumers as majority of them consider this information not trustworthy.

In order to provide successful marketing communication with consumers, companies should continuously educate and train employees about all crucial elements for a long-lasting relationship with consumers. In order to achieve it, companies must know how to send the right message to the right people at the right time and to ensure that consumers will be willing to transfer the message further and in a way do the job for the company. The message a consumer gets from the company must reach their emotions and it must be perceived as interesting and/or important so as to achieve spreading effect.

Word-of-mouth communication is remaining an important form of product promotion, as well as a way of shaping attitudes towards certain brands. In the situation where real contacts between consumers are replaced by virtual ones, social media play more important role in such communication. Each company should pay more attention to consumers’ opinions about its products and brands so as to ensure their maximum satisfaction, and consequently their own success.

LITERATURE


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IMPORTANCE OF EMPLOYEES IN CRM IMPLEMENTATION
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ABSTRACT
Following the trend of recent technological developments, customer relationship management is the future of any enterprise business today. The paper explains the theoretical concept of customer relationship management, its characteristics, objectives and benefits. While implementing this strategy, it is necessary for the company to prepare itself for the upcoming changes and to eliminate or reduce the difficulties that may stand in the way. Having in mind the importance of the human factor in any company, this paper focuses on the employees affected by this change of implementation. Every CRM implementation has certain barriers that can directly affect on the behaviour of the employees. This paper demonstrates the difficulties that employees can experience, how this change affects them, what their thoughts are and what is the most important for them when introducing CRM as a new solution they will use in their business process. Also, this paper shows how the company can reduce difficulties and obstacles, which conditions must be satisfied in order to successfully implement the CRM and how to encourage the acceptance of the CRM by employees.

KEYWORDS: Customer relationship management, human resources, change management, CRM implementation.

1. INTRODUCTION
The aim of this research was to determine the greatest obstacles that thwart employees from performing CRM. What their greatest fears are, what they consider to be the greatest advantages and disadvantages of change, what they think a manager’s responsibilities are, etc.

First, let us define what CRM really is. CRM is a strategic process that includes all business units and departments. It is a process that must be integral to the whole organisation. In other words, CRM is not merely a technical solution; It is a continuous process of learning that entails business strategy, business philosophy as well as a database (Osarenkhoe i Bennani, 2007; 139).

CRM is a field encountered in marketing, management, but also in information technology as well as science. A CRM application (software) strategy requires the usage of information, processes, technology and people who work on maintaining a relationship between the company and its clients (such as marketing, sales and support department etc.) An effective CRM increases client loyalty, reduces costs and increases the overall value to the company as well as to the interest groups that the company does business with (Kangal, 2012.; 45-61).

Implementing CRM requires an increase in knowledge and capability of the employees, ensuring additional training, motivation and authority. One of the key requirements for this to work is to create a new business culture and a new set of values, based on the client that will result in a reorganization of the business process.

Company related obstacles are in fact the reason why employee related obstacles can be encountered before and during CRM implementation. The company’s actions will directly influence the employees’ behaviour. As it has already been stated, implementing CRM requires all departments in the company to work together (Yurong, Yen, Binshan i Chou (2002.; 443) so many companies took different actions in order to better develop their employees and achieving a satisfactory level of internal and external relations as well as client satisfaction (Proctor, 2003.; 268). In order for all departments to work as a whole, it is absolutely crucial to have a strategy focused on human resources.

According to Shum et al. (2008; 1366), there are 5 organizational factors that affect the employees and their acceptance of change during CRM implementation:

(1) organizational culture,
(2) leadership,
(3) cross-functional integration,
(4) training / communication,
(5) technology.
Some of the key reasons why employees will not accept CRM are:

- Fear of the unknown, of failure or error
- Lack of motivation
- Unreal expectations
- Lack of information

Employees experience a variety of fears during change. These fears can mostly be categorized as one of the following: Fear of the unknown, fear of failure and fear of error.

Employees find it hard to detach from their routines. The “unknown” is everything that is out of their everyday routine. In order for them to be well acquainted with the whole implementations, it is up to the managers to explain in detail what the change brings and what is expected of them. It is necessary to define the changes in as much detail as possible. Make sure that everything is up to date, so that all changes are adequately followed and the “unknown” becomes more and more clear.

New projects that implement new technical solutions always bear a risk of failure and this is something that most employees wish to avoid. They fear failing and the loss of status that this failure can bring. Failing to meet one’s own high expectations, peer pressure, thinking that someone else would do better etc., are some of the reasons why a lot of employees fear failure.

They are afraid of making a mistake because they are afraid of losing their job, being penalized verbally and / or financially etc. Managers need to communicate with the employees and make them realize that mistakes will be tolerated, thus alleviating at least a part of the mentioned fears. Without this, the employee will not even try to accept a new CRM solution. Motivation is also one of the key factors in any change process within an organization (Brčić, Malbašić and Đukes, 2013; 279-296). Employees who are not motivated will not feel no attachment to the company which can result in frustration and leaving the organization altogether.

Employees become unmotivated when one or more their basic needs are not fulfilled: The need for trust, the need for hope, the need for sense of value and the need for sense of jurisdiction (Leigh, 2005.). Another thing that can result in employees’ lack of motivation during the implementation is if the employees do not see that they’re getting support from upper management. It is necessary to ensure a climate where employees will feel both comfortable and supported - in other words, where they know they always have someone to turn to with questions.

Pressure of unreal expectations is something that more and more employees encounter in today’s industry and can transform the best of them into an indifferent, absent minded and inefficient worker (Jackson et al., 1982; 58-68).

The most common mistake that a management can make is lack of communication and information sharing between all employees that are affected by the change directly. During this change (software implementation), the focus is on interaction (communication) with all sides included in the process (Brown and Eisenhardt, 1997.).

Misunderstanding the goals (or not understanding them at all) results in the employees not knowing what they should do, what is expected of them and what the business routine should in fact be. This lack of understanding is easily encountered when the employees have not been notified about the oncoming change on time. Another way to encounter this problem is failing to link their current assignments to the CRM implementation or simply failing to familiarize the employees with the vision of the whole change (leaving them oblivious to why the CRM is being implemented in the first place).

If the employees are not made aware of the benefits (e.g. what will be made easier with CRM, what are the advantages for themselves, what new skills will they acquire and will that make them more competitive within the company as well as on the job market), then they will have a hard time accepting the change.

2. METHODOLOGY

A research has been conducted for the purposes of this article. A sample of 13 people from two Croatian companies was taken (we shall call them Company “A” - which had introduced CRM for the first time and Company “B”, whose employees had already experienced one previous CRM implementation).

A semi-structured guide was used to perform this research. Interviews took place in November 2013 and lasted for 1hr each. The examinees were able to add their own comments and thoughts to their answers.
There were notable limitations that the examinees had during this interview, such as being unable to clearly put thoughts into words, or having reservations because of fear of judgement, as well as the time that had gone by between the CRM implementation and the actual interview (It is not easy to accurately remember one’s thoughts and feelings from long ago). Another obstacle was the fear of sharing information as well as fear of negative criticism. After the interviews were done and the data was gathered, a thorough content analysis was performed.

3. RESULTS

After the interview, the results were classified into two distinct categories: Those that had used another CRM system prior to the latest CRM implementation and those that had not.

Out of 13 examinees, 8 of them had never before encountered a CRM system and this was the first implementation they had witnessed.

The research has shown that the employees that had already undergone a CRM implementation had minimal resistance to the new implementation. In fact, they welcomed the change.

The group that faced a new CRM without having used another experienced insecurity and fear. The least of the fears was experienced regarding making mistakes, which was directly linked to the working environment. Those that said there was no fear of making mistakes also pointed out that the working environment had a healthy team spirit and learning culture, which made it desirable to help others. The fear of making a mistake was minimized by the fact that they were surrounded by others who helped prevent mistakes and fix them if they did end up happening. All examinees stated that a lack of team spirit would have been a huge detriment to their acceptance of the CRM. The environment affected their readiness to change directly, and all of them emphasized that this was a key factor in overcoming all insecurities.

The most expressed fears that the newcomers to CRM experienced were the fear of the unknown and the fear of failure. CRM requires some skills and knowledge that the employees never encountered before which provoked the fear of failing (of not being able to master the new program and all of its functionality). The fear of the unknown is always there when a person faces something for the first time.

Furthermore, the employees who had better communication with their superiors were already introduced to the meaning of CRM - to how it will serve in their work processes. Those employees that stated they hadn’t known anything about CRM before it made its way into their work day, had no communication with their superiors, leading us to believe that these employees saw less benefit in the CRM simply because they had no idea what it brings.

Those same employees felt pressure on their daily tasks. Those that didn’t stated that at least a part of the change was explained to them during conversation with their superiors.

Also, those employees were surer of themselves as well as the oncoming change. They stated that they were able to see benefits from introducing the CRM such as faster and more efficient work, easier data handling etc. Some examinees said that they did have some communication, but that their comments were disregarded which made them less motivated.

All of the examinees stressed out that they weren’t involved in the process of introducing the CRM even though they were willing to state their opinions. Not having the end users take part in the whole process resulted in a large number of illogical occurrences in the system which lead to all kinds of dissatisfaction. It is this very problem that can easily turn into frustration, which can (as one of the examinees stated) lead to the employee leaving the organization.

Oh the other hand, the examinees that said they hadn’t been actively involved in the implementation, stated that they feel like they weren’t motivated enough (or at all) by their superiors. Those who experienced a CRM implementation for the first time stated that they didn’t feel excluded. Those that had used a CRM before felt unmotivated by being excluded from the business problematic (as they had sufficient knowledge to provide relevant input). Their exclusion provoked dissatisfaction.

Those examinees that had been briefed well about the CRM implementation didn’t feel like the expectations were too high. Those that lacked briefing on the progress and the whole process did feel like the expectations were too high, since they didn’t even know precisely what they were (what is expected of them, in what time span and in what way).

Half of the examinees had had training and education and they considered it helpful in terms of speeding up their understanding of the system. However, they did point out that they feel like they could have learned more, had the training included their business process, and not just a show of functionality. Those examinees that had received no training, the fear of the unknown was much more present.
Finding one’s way around a new system requires feedback from one’s superiors, after spending some time using the system. Half of the examinees got that feedback and were very happy about it. This in turn helped them use the system more efficiently.

The other examinees (that got no feedback) said they needed much more time to adapt.

What motivates employees most is being able to progress with their newly acquired skills and more efficient work. A direct financial reward (in the form of a bonus or commission) comes second on the list of good motivators. The third place is held by team building and discussion with the superiors about the software (and being able to give suggestions on improvement).

Choosing a bad technical solution, without consulting the end users, followed by little or no training is considered to be the biggest mistake possible. The second place is held by the employees not being included into the process. Excluding the end user from the process of creating a system surely results in a sever lack of quality in that system.

All of the examinees understood the point of CRM. Those that had education saw it earlier, while those that didn’t only came to see it through usage. They all realized how CRM enabled them to work and access information faster, as well as to see all data relevant to the customer and his prior contacts with the company, better problem solving and more efficient support.

The introduction contains some of the obstacles that can appear because of the company itself. Obstacles like not having all employees included in the process, poor choice of software, lack of flexibility on the organization’s part, badly defined goals and lack of support from the management. This research has shown that the desire to accept the new system is greater if the employees are included into the process and their suggestions taken into account. One of the employees expressed frustration by the poor choice of software. He also stated that the company didn’t listen to the advice given by those that actually have to work with the software and know its shortcomings. The lack of flexibility on the organization’s part didn’t pose that much of a problem since all of the examinees were younger people who readily accept new knowledge. More than half of the employees stated that the goals hadn’t been clearly defined at the beginning because there was no communication with the superiors.

They also felt that the bar was set too high. The reason for such high expectations could be connected to the fact that (as stated by the examinees) there was no cooperation or conversation between them and their superiors that had set those goals in the first place, which is a clear sign of poor management support (that in this case resulted in higher pressure on the employees).

There are also some obstacles on the employee’s part which were mentioned in the introduction. The most common ones that slow down or put the change to risk are unrealistic expectations and pressure that affects the quality of work. Lack of information and motivation, together with fear add to those obstacles. These are handled by setting up a quality organizational culture, introducing training and education, enticing the employees and finally - communication.

All of the examinees stated that a learning culture within the organization helped them fulfil the requirements that were set before them. It is precisely because of this culture that none of the examinees resisted the change, or learning new skills and acquiring new knowledge. Half of the examined employees had training, and they stated that this helped them understand things and learn the software features quicker. The other half, that had no education, took much longer. None of these employees got a financial bonus as a form of motivation and more than half of them felt like their superiors gave too little feedback on how the implementation was going, disrupting their motivation further. Those employees that had more info on the changes, felt more motivated and included, and the goals felt less stressful and demanding. Table 1 shows the research results with the key data
## Table 1. Employee stance on obstacle factors on the company’s part

<table>
<thead>
<tr>
<th>Most important factors</th>
<th>First CRM software</th>
<th>Second CRM software</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotions during software introduction</td>
<td>Sense of fear</td>
<td>Sense of excitement</td>
</tr>
<tr>
<td>Exclusion of employees</td>
<td>Lack of motivation</td>
<td>Lack of motivation</td>
</tr>
<tr>
<td>Learning organizational culture</td>
<td>Motivation</td>
<td>Motivation</td>
</tr>
<tr>
<td>Poorly defined goals</td>
<td>Pressure</td>
<td>Lack of motivation</td>
</tr>
<tr>
<td>Poor management communication</td>
<td>Slower progress, not seeing the benefits of CRM</td>
<td>Lack of motivation</td>
</tr>
<tr>
<td>Training and education</td>
<td>Quicker learning and progress</td>
<td>Motivation, lessened negativity towards CRM</td>
</tr>
<tr>
<td>Best motivation</td>
<td>Opportunity of progress</td>
<td>Financial bonus</td>
</tr>
<tr>
<td>Taking part in giving ideas and suggestions</td>
<td>Neutral stance</td>
<td>Highly positive</td>
</tr>
</tbody>
</table>

Source: authors

The theoretical part of this text can help give managers some insight into all the important subjects that they need to tackle when introducing and implementing a CRM.

The value of information and contact with the people are two things that no company and no manager can afford to disregard, when introducing a CRM.

The first things one needs to ask himself are: Why is the project being started in the first place, what are its goals and the vision behind it? What are the improvements that this brings to the people in the organization? It is impossible to follow a leader without a vision. Theory often mentions employees resisting any change, which is a part of human nature. However, having studied rather young (20 - 26) employees in the IT sector, shows a new generation that loves challenges, support a dynamic company and want to meld with the company they work in.

In other words, most of the examinees have shown a high level of willingness to invest time and effort into enhancing a system that benefits both them and the company. Good management must be able to recognize an opportunity to expand their knowledge and see the project form different perspective, thus building an interactive learning environment. Open and honest conversations about an oncoming change can greatly decrease fears that might otherwise appear, as proven by this research. Any bit of information coming from the employee, gives the management feedback which serves as a base for knowing the process, the system as well as the stance, the thoughts and ways to distribute the workload. This is how it is possible to reduce the obstacles to a minimum, thus creating a positive organizational culture and an environment that makes this organization a desirable place to work.

Knowing one’s employees is knowing what, when and how you can count on. It helps predict reactions, make quicker decisions and reduces reaction time to surprise effects from the outside. Aside from that, the employees will be quicker to accept change if they are familiar with the benefits that CRM offers, which will reduce resistance.

To ensure maximum effort and engagement of the employees during the whole project, it is necessary to motivate them. One thing goes against known theories: while they claim that money is the sole greatest motivator for accepting change, the research has shown that the employees’ top priority is being able to progress on their job, while a financial bonus comes second. Young people look at material means as a momentary and temporary reward, while the possibility of progress offers something for the future and influences their career directly.

Another important point is the importance of preparing an employee for work in a new system, and an efficient use of this system. Theory claims that the employee must be motivated for any change. This research shows that education and training are very important for getting a positive attitude from the employees toward the system. It also shows that the employees lacked practical knowledge and preparation, which would have saved time and made them quicker in reading data, in other words - enabled them to perform better overall.
Possible suggestions for future research go towards the importance of the employees’ age, knowing if any software had been used in the company before or if this is the first time, what kind of organization the employees are working in (what phase of the development cycle does the company find itself in, as well as the company’s size) etc. To completely understand the employees’ attitude and possible resistance, it is important to include people of different ages in the study, because different age groups are likely to have different behaviour and thinking patterns and stances. It is also necessary to inspect possible obstacles that a company can encounter in its development stage (as opposed to a mature stage). The development cycle of a company can affect its organizational culture and environment (Wiklund i Shepherd, 2005.), and with it, the behaviour of the employees. Moreover, the company’s size can also be a factor in change acceptance, and this too must be taken into account when conducting research.

4. CONCLUSION

To ensure a successful implementation of a CRM system as well as the whole strategy of a company, it is crucial that the organization is made in a change-friendly environment. Managing changes throughout the whole implementation requires long term investment into human resources such as training, team building, exercises, communication, feedback and the whole company culture (Shum, Bove i Auh, 2008).

Every change, including this implementation change, encounters different cases of resistance which need to be reduced or avoided. Both the company and the employees have barriers that slow down the oncoming change. Theoretical knowledge teaches us that without adequate leadership, employees cannot know their role in the new process can hardly make themselves a part of this change and cannot improve the process of marketing and sales. This was confirmed by this research since employees stated that lack of guidance and training resulted in difficulties. It is important to say that CRM is presented to all users (employees) as a strategic process that will be of use to them.

The research also shows that employees have a desire to be a part of this change, by contributing to the system’s creation as well as expanding their own knowledge, all with active help from the management. All examinees agreed on communication having a positive effect on the outcome of the whole implementation project. Without focusing on the human factor, implementation projects often fail. The right way to motivate, guide and invest in employees is a key factor during such an implementation, and it must not be ignored. Instead, it must be used as potential and as means to make the company more competitive.

LITERATURE


5. Leigh B. (2005.) How to recognize the subtle signs and act before it’s too late: THE 7 HIDDEN REASONS EMPLOYEES LEAVE, Saratoga Institute


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ABSTRACT
This paper examines the impact of bank credits to households and non-financial companies on economic growth and money supply. Using statistical methods aim of this study is to determine the direction and strength of the relationship between the variables in the period 1993-2013. Research results for the total period imply the existence of a positive statistical correlation between credit to the private sector with economic growth and money supply. However, in shorter periods of variable credit to the private sector in the model becomes statistically insignificant, regardless of whether the period of economic growth or decline. The conclusion is that bank credits to the private sector in Croatia have a positive effect on economic growth in the longer period.

KEYWORDS: bank credits, GDP, money supply, Croatia.

1. INTRODUCTION
The economic downturn in Croatia lasts from 2009, and the cumulative rate of decline in GDP from 2009 to 2013 is 12.5%. On the other hand, the financial sector is predominantly bank oriented and the share of bank assets in the total assets of the financial sector is over 75% while the share of private sector credit to GDP is nearly 75% also.

The global financial crisis and recession period were again the focus of economic research pushed the interaction between bank credits and real sector as a key issue of recovery. Studies by many authors and institutions have produced interesting results about the economic recovery after the crisis.

Starting from the specified and the fact that the global financial crisis of 2008 hit and other countries, it seems justified to analyze the interrelationships and trends in variables such as GDP, credit to the private sector and the money supply (M1). However, the experiences of other countries and post-crisis recovery showed that bank lending generally has a positive effect on economic growth, but some authors also indicate the existence of the so-called credi-less economic growth. Moreover, in some cases greater depth or development of the financial sector is a prerequisite for positive economic growth but also a source of danger from excessive lending and financial imbalances.

2. LITERATURE REVIEW
In the literature, the depth of the financial market usually shows the share of private sector credit to GDP and it is also the simplest indicator of relationship of the financial and real sectors ie. financial sector and economic growth. King and Levine (1993) show that financial development predisposes economic growth. According to Levine and Zervos (1998) and Rajan and Zingales (1998) the ratio of bank credit to GDP is a measure of the development of the financial sector. Levine et al. (2000) study confirms the existence of the relationship between finance and economic growth. Demetriades, P.O. and Law, SH (2006) provide evidence that financial depth does not stimulate economic growth in countries with weak institutions, but that institutional quality in terms of regulation and supervision affects the relationship between financial depth and economic growth.

Arcand et al. (2012) conclude that there is a positive and strong correlation between the depth of the financial sector and economic growth in countries with low and medium-developed financial sector but they also found that there is a threshold (which are estimated at 80-100% of GDP) above which financial sector begins to have negative effects on economic growth. This happens when the share of private sector credit to GDP ratio exceeds 100%. They cite two reasons why large financial systems can have negative effects on economic growth and that a) due to economic instability and increased opportunities for economic collapse and b) due to incorrect allocation of resources even in good times.

The share of private sector credit to GDP can be seen as a) the total credits of banks and non-banking sector and b) as a pure bank credits. Historically, the share of total credits and bank credits to GDP by different countries varied. Thus, the share of total credits to GDP in the case of Germany (120%), Canada (140%), while in Ireland crossed 300%. On the other hand, the average share of bank credits in total credits advanced economies and emerging economies is about 70% (BIS, 2013).
Credits to households to GDP depending on the country ranging from 30-60% in many countries exceed the amount of the share of corporate credits to GDP (BIS, 2013).

So Biggs et al. (2009) point out that the relationship between GDP and credits after the crisis differs from the connection in the normal period, because the link between post-crisis GDP and credits volatile and loses its importance for the growth of GDP. Biggs et al. (2009) define a credit-less recovery as a recovery without GDP growth rate credits. They say that economic growth is an essential flow of credits rather than credit amount.

However, comparing the so-called credit-less recovery and normal recovery Abiad et al. (2011) in their study concluded that of five recoveries only one economic recovery is credit-less. Moreover they concluded that such a recovery is weak and one-third smaller than the normal economic recoveries.

Research Bijsterbosch and Dahlhaus (2011) has shown that the incidence of credit-less recovery in emerging economies will double after banking and foreign exchange crises, but this type of recovery precedes the economic downturn and financial stress especially if the private sector indebtedness is high and the country relies on capital inflows from abroad.

Kanann (2010) concludes that credit conditions for recovery from recession after the crisis contribute to the inertia of recovery and economic growth.

Coricelli and Roland (2011) exploring the economic recovery without credit conclude that alternative credits such as commercial credits, allowing companies quicker recovery of production in spite of restrictive credit conditions.

Tkatas and Upper (2013) exploring the 39 financial crisis has concluded that changes in bank credit in nominal terms or relative to GDP is not correlated with economic growth, the first two years after the crisis, while the third and fourth year correlation between credit and GDP statistically significant but small in economic terms. Also, they concluded if the credit boom preceding the financial crisis, then the connection between economic recovery and private sector lending and different recovery was more negatively correlated with deleveraging.

Avdjiev and Zeng (2014) exploring the interaction of credit, monetary policy and GDP conclude that monetary policy shock strongest when the economic activity is sluggish, while the GDP is most sensitive to credit shocks while the economy thrives and booming.

Generally, traditional credit channels of bank lending have experienced intense changes after the financial crisis of 2008 and the key question is whether the current credit channels remain or will disappear by passing crisis (Gambacorti and Marques-Ibanez, 2011).

In addition to monetary aggregates as an appropriate measure of liquidity of some markets (Rueffer and Stracca, 2006; D. Agostino and Surico, 2009), there are also authors who argue that the availability of bank credits is only true measure of national and global liquidity (Bruno and Shin 2012; Domanski et al. 2011). This especially applies to those countries that maintained liquidity in the banking system by the primary emission of money, ie. quantitative easing instead that banks collect deposits from companies and individuals.

Borio, C. (2012) concludes that the banking system simply does not transfer real resources from one sector to another, but generates a nominal purchasing power, and the deposits in the bank were not present prior to lending. Credits are the ones who create new deposits.

3. DATA

Data relating to credits to the private sector in Croatia were taken from the consolidated balance sheet of all banks with the Croatian National Bank. Data on the movement of GDP and movement of money were taken from available Bulletin of the Croatian National Bank and the statistical publications of the Central Bureau of Statistics. Collected and analyzed data relating to the period 1993rd to 2013th year.

As for the depth or degree of development of the financial sector measured by the share of credits to the private sector in Croatia, despite the cumulative decline in real GDP growth rates of 12.5% (beginning 2009 - end of 2013) in the same period reveals an increase in the share of private sector credit in GDP by 5 percentage points.

The reason is that during this period the nominal GDP fell from 343.4 billion HRK (2009) to 326.8 billion HRK (2013), a drop of 16.6 billion HRK. At the same time credit to the private sector in the same period increased only by 5 billion and the net difference between the fall of GDP and an increase in credit to the private sector amounted to -11.6 billion HRK. It can be concluded that the increase in the depth of the financial sector and increase the relative share of credits to GDP actually due to a net decline of GDP, rather than an increase in credit to the private sector (Figure 1).

1 See the www.hnb.hr Bulletin, No. 205, 2014 ; www.dzs.hr/default.htm
2 All data are from the end of the period and at the end of 2013, the GDP amounted to 326.8 billion HRK, total credits to the private sector 242.4 billion HRK, credits to the corporate sector 115 billion HRK, credits to households 127.4 billion HRK, money supply (M1 ) 58.5 billion HRK, reserve money 63 billion HRK, exchange rate HRK: 1EUR = 7.6376.
With the intention of establishing a statistical link between bank credits to the private sector (household and corporate sector) and GDP, calculated the annual growth rate of credits to the private sector and compared with real annual GDP growth rates (Figure 2).

Since Croatia is specific and one of the few countries that has a reserve money (M0) greater than the money supply (M1)\(^3\), data on trends in private sector credit data on the movement of money should be used to establish statistical links between these two variables. In fact, as any increase in reserve money and more lending means increased use of credit potential which affects the creation of new money supply.

However, in Croatia, the money supply is lagging behind developments in reserve money. Since the onset of the recession of 2009, reserve money was always greater than the money supply. At the end of 2013, reserve money is greater than the money supply by as much as 10 billion of HRK.

Therefore, it is important here to establish the existence of possible statistical link between private sector credit and money supply, in order to determine the direction and strength of the statistical link between credit and money supply. This relationship and the regression parameter should reveal whether and how any increase in loan creates money supply growth. Annual growth rates of private sector credit and money supply can be seen in Figure 3.

\(^3\) According to the latest data of the Croatian National Bank (www.hnb.hr Bulletin), throughout the period from January 2009 to May 2014, reserve money is greater than the money supply, and the money multiplier (money supply / reserve money) for example, at the end of 2013 was 0.93 only.
Figure 3. Annual growth rates of private sector credit and money supply; %

Source: www.hnb.hr Bulletin, authors' calculations

4. RESULTS AND METHODOLOGY

To determine the relation and interaction between the studied variables are used to model a \[ Y = \beta_0 + \beta_1 X_1 + \ldots + \beta_n X_n + \epsilon, \]
where \( Y \) is the dependent variable and \( X \) independent variables.

The dependent variable (\( Y \)) represent the real annual GDP growth rates in the period 1993rd to 2013th, while the independent variable (\( X \)) are the annual growth rate of credits to the private sector a) as the total amount of credits to corporate sector and household credits, b) as separately movement loans to corporate sector, and c) as a separate movement of credits to households.\

The main results of the numerical calculation method OLS regression showed statistical significance (\( p < 0.05 \)) for all three loans as separate independent variables (Table 1). The coefficient of determination is the largest in total loans (0.5197) and is almost equal to the coefficient of determination to loans to households (0.5183).

This means that the correlation between the growth rate of these creditss and GDP is medium strength with approximate coefficient of 0.72. In the case of relations between corporate credit and GDP growth, the coefficient of determination is much smaller (0.33300) which would mean that the correlation coefficient between these variables is 0.57 and it is on the border between weak and medium strength.

Table 1. Regression results of the impact of private sector credit to GDP growth

<table>
<thead>
<tr>
<th>OLS and Regression Statistic</th>
<th>Variable: Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total (corp. + household)</td>
</tr>
<tr>
<td>GDP, parameter</td>
<td>1.0674</td>
</tr>
<tr>
<td>p-value</td>
<td>0.00025</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.519747</td>
</tr>
<tr>
<td>F-test</td>
<td>19.4802</td>
</tr>
<tr>
<td>Observations</td>
<td>20</td>
</tr>
<tr>
<td>Standard error</td>
<td>2.6240</td>
</tr>
</tbody>
</table>

\footnote{Processing software was used to www.wessa.net}

\footnote{See Appendix 1, for further studies consider DW and the AR (1)}
In order to determine the direction and size of the statistical correlation between credit to the private sector and the creation of money supply, below the dependent variable representing an annual growth rate of money supply (M1) in the period 1993rd to 2013th, while the independent variable representing an annual growth rate of credits of the private sector (as in the previous case).

Calculation results OLS method showed a p-value less than 0.05 and that the independent variables are significant in the models (Table 2). Here it was shown that the coefficient of determination largest in credits to households (0.4643), which indicates a positive medium strength correlation (0.68) between the credit and the M1.

However, a small coefficient of determination of total loans (0.2728) and loans to corporate sector (0.2199) indicate a weak correlation between the growth rate of these loans and the rate of growth of the money supply. Thus, it can be concluded that the structure of total loans due to statistical properties, the greater the impact on the creation and growth of the money supply in the period have credit to households, rather than the corporate sector.

Table 2. Regression results of the impact of growth Credit on the growth of M1

<table>
<thead>
<tr>
<th>OLS and Regression Statistic</th>
<th>Variable: Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total (corp. + household)</td>
</tr>
<tr>
<td><strong>M1, parameter</strong></td>
<td>1.008703</td>
</tr>
<tr>
<td><strong>p-value</strong></td>
<td>0.018135</td>
</tr>
<tr>
<td><strong>R-squared</strong></td>
<td>0.272878</td>
</tr>
<tr>
<td><strong>F-test</strong></td>
<td>6.755138</td>
</tr>
<tr>
<td><strong>Observations</strong></td>
<td>20</td>
</tr>
<tr>
<td><strong>Standard error</strong></td>
<td>22.934988</td>
</tr>
</tbody>
</table>

To determine the direction and magnitude of statistical link between money supply (M1) and GDP, made a model of simple regression analysis with the results obtained (Table 3). Independent variable M1 is significant (p <0.05) in the model, but with a relatively low coefficient of determination (0.3027), which indicates a relatively weak correlation between the movement rate of growth of money supply and GDP growth. The correlation coefficient is 0.55. It can be concluded that a rise in the money supply by 1 percentage point of GDP increases by only 0.077 percentage points.

Table 3. Regression results of the impact of money supply to GDP growth

<table>
<thead>
<tr>
<th>OLS and Regression Statistic</th>
<th>Variable: Money supply (M1)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td><strong>GDP, parameter</strong></td>
<td>0.077465</td>
</tr>
<tr>
<td><strong>p-value</strong></td>
<td>0.011941</td>
</tr>
<tr>
<td><strong>R-squared</strong></td>
<td>0.302789</td>
</tr>
<tr>
<td><strong>F-test</strong></td>
<td>7.817154</td>
</tr>
<tr>
<td><strong>Observations</strong></td>
<td>20</td>
</tr>
<tr>
<td><strong>Standard error</strong></td>
<td>3.161653</td>
</tr>
</tbody>
</table>

Given the already mentioned fact that the cumulative decline in GDP in the period 2009-2013 was 12.5%, but with respect to the period from 2004 to 2008 the cumulative GDP growth was 20.5%, the intention is to establish the existence of a statistical link between growth of credit and GDP in shorter time periods. For this, take quarterly data on the movement of credit and GDP in very recession period (2009-2013) and the period of relatively strong economic growth (2004-2008).

Regression analysis over the 20 quarters of recession and economic growth, in both cases the results show that the independent variable, total credits to the private sector was not significant (p> 0.05), suggesting that in our conditions over short periods credit to the private sector did not correlate with GDP growth (Table 4). It is obvious, therefore, that in the analyzed period, this structure loans with regard to end-users shows no statistical relationship with the growth of GDP.

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6 See Appendix 2, for further studies consider DW and the AR (1)
7 See Appendix 3, for further studies consider DW and the AR (1)
8 See Appendix 4
Table 4. Regression results of the quarterly impact of credit growth in quarterly GDP growth

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP, parameter</td>
<td>1</td>
<td>0.404711</td>
<td>0.379162</td>
</tr>
<tr>
<td>p-value</td>
<td>2</td>
<td>0.072743</td>
<td>0.42625</td>
</tr>
<tr>
<td>R-squared</td>
<td>3</td>
<td>0.167935</td>
<td>0.035509</td>
</tr>
<tr>
<td>F-test</td>
<td></td>
<td>3.632938</td>
<td>0.662691</td>
</tr>
<tr>
<td>Observations</td>
<td></td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>Standard error</td>
<td></td>
<td>1.539712</td>
<td>2.733892</td>
</tr>
</tbody>
</table>

5. CONCLUSION

This paper is in the case of Croatian focused on determining the existence of a statistical link between private sector credit growth and GDP growth and money supply. Croatia is an interesting example of the reason that in addition to Greece is the only country in the European Union, which is in recession for more than five years with a cumulative decline in GDP of 12.5%.

Research results in the period 1993 - 2013 showed:

a) The growth rate of total credit to the private sector are positively correlated medium strength with growth rates of GDP, but the fact is that the growth rate of credits to households have a higher correlation with the growth of GDP than credits to the corporate sector,

b) the rate of growth of household credits have a positive correlation medium strength with growth rates of money supply as opposed to credits to corporate sector with weak positive correlation with the growth of the money supply (M1),

c) the rate of growth of the money supply have weak influence on the growth of GDP.

The results concerning the correlation between the growth of total credit to the private sector and GDP growth over the shorter of the quarterly periods from 2004-2008 and 2009-2013 showed that the total credit to the private sector is not statistically significant in the model.

It can be concluded that despite the long-term positive statistical relationship between private sector credit growth and GDP growth, still there is no firm statistical positive correlation between these variables with a correlation coefficient greater than 0.80. Also, it showed that household credits are statistically significant for the growth of GDP and the money supply rather than credits to the corporate sector, from which it can be concluded that the current rise / fall in GDP was more associated with household final consumption expenditures rather than investment.

LITERATURE


9 See the: http://epp.eurostat.ec.europa.eu/portal/page/portal/eurostat/home/
10 Existing inadequate distribution and use of private sector credit, strong damaging two important facts from the end of 2013, namely: a) the central government budget deficit of -17.9 billion HRK (-2.3 billion EUR), which is 5.5% of GDP, b) Croatian foreign debt amounting 45.6 billion EUR which amounts to 105.7% of GDP.


22. WWW: http://www.dzs.hr/default.htm

23. WWW: http://www.hnb.hr/publikac/hpublikac.htm

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APPENDICES

Appendix 1.

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*Durbin-Watson (DW) 1.353547; 1st Order Autocorrelation -AR(1) 0.395495

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ABSTRACT

Fashion design is a part of growing and fast developing creative industry. Researchers, when doing researches in fashion, mostly focus on textile and apparel industry and fashion designers remain unexplored. In this paper, economic importance of fashion designers, as part of creative industry, is defined and explained as well as marketing strategies they are using. Secondary and primary data sources are used (interviews with Croatian fashion designers). Furthermore, the SWOT analysis of Croatian fashion designers is presented in the paper and the research objectives - defines specific marketing strategies of fashion designers and analyses their economic perspectives, are achieved.

KEY WORDS: fashion design, creative industry, SWOT analysis, marketing strategies.

1. INTRODUCTION

As Creative Economy Report (United Nations, 2010) suggests, the creative economy sectors have a huge potential to contribute to the growth and prosperity, especially for developing countries seeking to diversify their economies and build resilience to future economic crisis. When observing fashion industry, it can be concluded that the role of designers is crucial to its success. All fashion designers should be able to strike the right balance between original design, suitability for the market and satisfying customers requirements (Easey, 2009). This research will focus on the fashion design as part of creative economy.

In Great Britain, for example, designer’s fashion forms a small but important part of the entire British textile and clothing industry (UK Government, 2001). For the purpose of finding precise data about designed fashion participating in Croatian textile and clothing industry, Croatian Association of Artists of Applied Arts (cro ULPUH) was contacted due to the fact that in their Section of Textile creative work, are many Croatian fashion designers registered. Unfortunately, there is no precise data about how many fashion designers operate in Croatia. Fashion designers can be formally educated in Croatia at University of Zagreb Faculty of Textile Technology or at private school Callegari – Italian School of Fashion and Design and private school Profokus.

Previous fashion marketing research in Croatia observed companies registered as textile and clothing industry (part of manufacturing industry, sectors C13 and C14) (Grilec Kaurić, 2009) not fashion designers operating as entrepreneurs that are considered part of creative industry. Independent fashion designers operating as entrepreneurs, their marketing activities, strategies and brand management are in the focus of this research as they are main drivers of the fashion scene and creators of fashion trends in Croatia.

The paper begins with the theoretical framework where the concept of fashion industry as a part of creative industry is presented. This is followed by the methodology adopted and then an analysis of the research findings. For the purpose of this paper, a qualitative research was conducted using in-depth interviews carried out with a sample of 9 Croatian fashion designers. The research is guided by the following research question: Which specifics in marketing activity are highlighted by Croatian fashion designers? Research question is followed by the following research objectives: (1) to detect awareness of marketing importance by Croatian fashion designers; (2) to recognize marketing activities they insist on; (3) to find out which activities they do to attract costumers and to manage their fashion brand(s); (4) to present strengths, weaknesses, opportunities and threats of Croatian fashion industry. Finally, an integrated conclusion, summarising the results, developing managerial implications and providing suggestions for future research is provided.
2. LITERATURE REVIEW

The term “creative industries” has a different meaning in different countries. It is of relatively recent origin, from Australia 1994 when the report, Creative Nation was launched of. It gained wider exposure in 1997, when policymakers at the United Kingdom’s Department of Culture, Media and Sport set up the Creative Industries Task Force (United Nations, 2010).

The UK Government Department for Culture, Media and Sport (DCMS) defined the creative industries as ‘those activities which have their origin in individual creativity, skill and talent and which have a potential for wealth and job creation through the generation and exploitation of intellectual property’ (1998). In its first mapping document in 1998, the DCMS went on to define the following industries as creative: advertising, architecture, art and antiques market, crafts, design, fashion design, film and video, interactive leisure software, music, performing arts, publishing, software and computer services, television and radio. It can be seen that the fashion design found its place as part of the creative industry.

Unlike creative industry, UNESCO defines cultural industry as those industries that combine “the creation, production and commercialization of contents which are intangible and cultural in nature. These contents are typically protected by copyright and they can take the form of goods or services” while in France the “cultural industries” have recently been defined as a “set of economic activities that combine the functions of conception, creation and production of culture with more industrial functions in the large-scale manufacture and commercialization of cultural products” (United Nations, 2010).

Today’s modern society can be considered as a society of fashion and the research field of fashion sociology includes industry that “creates fashion.” Theorist Fink considers that a very important branch of the cultural industry is the fashion industry while it does not only satisfy human need to dress up, but it has to lead it (Todorović, 1980).

Fashion can be defined as the product of class division that connects people of the same position, and at the same time distances them from those who do not belong to their group. Therefore, the fashion functions could be connection and distinction. According to Simmel, (new) fashion belongs to higher levels of society and remains like that until becomes accepted by the lower layers. At that moment, higher layers discarded it because that fashion has no longer a function of differentiation and they replaced it with a new fashion, and the cycle begins again (Odak, 2003).

Historically, different social groups (layers, ethnic groups, professions, classes...) consider as a holders and creators of fashion. In the industrial society, the role of the masses emphasizes in the context of fashion. Thus, the masses are the bearers of fashion that is shared and followed by a various social groups (Todorović, 1980). Featherstone (2001) states that the products of mass society are manipulated lifestyle and consumption, and that in the consumer culture, modern individual is aware that he can expresses himself with clothing and home, decorations, furniture and car, and the public consumer society suggests that, regardless of age or class affiliation there is always space for improvement and self-expression. Industrial society is transformed into a post-industrial society or mass consumption and resulted as the rapid development of economy and industry, which contributed to a decline in prices of fashion, and fashion products. Fashion cannot be expensive any more because it last shorter.

Therefore, fashion is one way of creativity, and according to Perinić (2010) creativity is a new form of capital that society invests in its development. The term ‘creative’ is often used in recent years, for example, the creative city, the creative industry and fashion design is one of the most important and the most prominent of creative sectors of our time, with earnings that significantly exceed those of the music or film industry (Bollier and Racine, 2005).

In analysing success of fashion design, it can be concluded that lots of previous researches showed that it depends on well-defined marketing program and marketing strategies. Lots of studies have focused on fashion marketing strategies (Easey, 2009; Okonkwo, 2007; Quinn et al., 2007; Moore & Fairhurst, 2003; Newman & Patel, 2004; Murphy, 1998). Easey (2009) defined fashion marketing strategy as a business philosophy that deals with current and potential customers of clothing, as well as products and services that are directly related to textile and clothing in order to achieve long-term objectives, and differs from other areas in which marketing operates.

3. FASHION DESIGNERS MARKETING STRATEGIES

3.1 Research methodology

For the purpose of this paper, a research study on the sample of 9 Croatian fashion designers was conducted. At the methodological level, the research was carried out by means of a qualitative study among 9 designers. Information’s were gathered using in-depth interviews in three months period (March-July) in 2014. Questions were based on the discussion pointed out in the theoretical part of the paper, and it included following questions:
• Do you have your own fashion brand?
• At which activities in marketing do you insist?
• Do you use help from marketing agencies?
• What is your opinion about marketing management in Croatian fashion?
• What activities you practice in order to attract costumers and brand management?
• Please define strengths, weaknesses, opportunities and threats of Croatian fashion industry.

Almost all fashion designers in the sample are entrepreneurs owning their own crafts or small Ltd companies (77.77%). One fashion designer is operating as independent artists (11.11%) and one is in process of setting up their own business (11.11%) but is already exposing their own designed clothing.

3.2. Research results

3.2.1. Fashion designers marketing strategies

All respondents have their own fashion brands for longer period of time (“the youngest” fashion brand is one year old, one is four years old, two are six years old, while five fashion brands are nine to fifteen years old).

Fashion designers responded that they, in general, insist on promotion through exhibitions, social media, and distribution at sailing points across the country. All of them have their own Web sites. Fashion designers with “younger” brands focus more at brand development. They highlighted that they are aware that their work will be represented by their brand. Well-established fashion designers focus at fashion events and two of them stated that they are connected with Fashion hr (called Institution for fashion show and fashion PR), while two others define all fashion weeks as important. While all respondents practise that celebrities wear their clothing when attending all kind of events, one fashion designer finds it the most important way of promotion. Only one fashion designer mentioned that his fashion collections were presented outside the country. All fashion designers agreed that the most important issue in their work is quality of their clothing and the most preferred promotion is personal recommendation. All of respondents agreed that their priority is resolving possible customers’ complains (though they do not have it very often).

Third of respondents do not have any help from marketing agencies. One of them claims that no one can represent him better than him alone. One have assistant who is in charged for marketing activities while more than a half (55.55%) cooperate with marketing agencies and fashion marketing experts.

Concerning marketing management in Croatian fashion industry, the majority agreed that marketing experts and fashion industry in Croatia are not connected enough. Small fashion designers do not have enough money to invest in good marketing campaigns and they turn to promotion through celebrities by giving clothing for free. They are aware that in Croatian fashion industry is lack of marketing knowledge and that marketing experts would be of a great help. Only one designer finds marketing experts useless and states that design awareness and personal expression are not well developed in Croatia yet.

Activities that they practise in order to attract costumers and manage their brands are various. They insist at notability and specificity in the market through product quality and visible logo. Two-thirds of them responded that they research the market with help of marketing agencies. Some of them keep participating in fashion shows, as mentioned before; they also try to be present in fashion magazines and on the fashion web sites that allow them to present their new collections. One is focused only at the production of tailored men’s suits by adapting technology he uses, searching always for new suppliers of more quality fabrics and accessories in order to have even more satisfied customers. Others are oriented at more diverse market niches, but all are aware of importance of positioning at the market.

3.2.2. SWOT analysis of the Croatian fashion industry as a part of creative industry

As opportunities of Croatian fashion industry, fashion designers identified the following: individuals (independent fashion designers operating as entrepreneurs or independent artists) who operate within the fashion scene and fashion industry and constantly trying to commit a turnover and improve the Croatian fashion industry; creativity; good ideas and relatively cheap production compared to other European countries; innovative design and educated personnel.

As weakness, they specified the following: under-investment in domestic labour, designers and market placement, expensive production in comparison to China; small and underdeveloped market; low demand for Croatian fashion
products (because people prefer buying foreign fashion products) and ignoring existing fashion designers and their work (from Croatian customers); high prices of Croatian fashion designed products that are not competitive (repellent for average customers); production only for fashion shows (in small sizes that are not suitable for selling because clothing can only be ordered without trying first); poor economic investment in fashion and departure of talented and educated fashion experts abroad.

In the opinion of Croatian fashion designers, opportunities of the Croatian fashion industry are: investing in the promotion at the Croatian market and achieving competitive prices; entering European market (because we are still cheaper in terms of production); visiting international fashion fairs that are part of Fashion Weeks and offering fashion products in order to get bigger orders; cooperation with companies from clothing industry that exist on the market for a longer period of years (eg Zigman for Bambi, Ziman and Elfs for Peko, Ivan Alduk for Amadeus, Tea & Frane form TIF CONCEPT for Galeb...) and possible international collaboration with foreign fashion designers.

Threats are the following: cheaper labour not only from the Far East but also from neighbouring countries (eg Bosnia and Herzegovina, Serbia), products of questionable quality and their short duration, low cost products and expensive raw materials.

Several fashion designers concluded that the situation in Croatian fashion industry is pretty bad while there are no investments in Croatian fashion industry, they cannot produce low cost products due to exclusivity of their production and originality and Croatian consumers are not attracted by their high prices. Those designers, who are oriented at tailored clothing, highlight the specificity of their business and they encourage development of awareness that designing tailored clothing is not necessarily a luxury but a way of thinking about dressing and buying clothing that we need.

Summarized SWOT analysis of the Croatian fashion industry is presented in Table 1.

**Table 1. SWOT analysis of Croatian fashion industry**

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses</th>
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<td>Creativity of fashion designers</td>
<td>Under-investment in domestic labour, designers and market placement,</td>
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<tr>
<td>Good ideas</td>
<td>Expensive production</td>
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<tr>
<td>Relatively cheap production compared to other European countries</td>
<td>Small and underdeveloped market</td>
</tr>
<tr>
<td>Innovative design educated personnel.</td>
<td>Low demand for Croatian fashion products</td>
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<tr>
<td></td>
<td>Ignoring Croatian fashion designers and their work</td>
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<td></td>
<td>High prices of Croatian fashion products</td>
</tr>
<tr>
<td></td>
<td>Poor economic investment in fashion</td>
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<td></td>
<td>Departure of talented and educated fashion experts abroad.</td>
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<table>
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<th>Opportunities</th>
<th>Threats</th>
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<tr>
<td>Investing in the promotion at the Croatian market</td>
<td>Expensive raw materials</td>
</tr>
<tr>
<td>Entering European market</td>
<td>Cheaper labour not only from the Far East but also from neighbouring countries (eg Bosnia and Herzegovina, Serbia)</td>
</tr>
<tr>
<td>Achieving competitive prices</td>
<td>Products of questionable quality and their short duration</td>
</tr>
<tr>
<td>Visiting international fashion fairs</td>
<td>Low cost products</td>
</tr>
<tr>
<td>Cooperation with companies from clothing industry</td>
<td></td>
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<tr>
<td>Possible international collaboration with foreign fashion designers.</td>
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</table>

Source: Authors

**4. DISCUSSION AND CONCLUSION**

This research contributes to a better understanding of the market strategies and activities used by Croatian fashion designers when “struggling” in Croatian market and for Croatian customers. The main idea was to detect their awareness of necessity of applying appropriate marketing strategies and using appropriate marketing activities in order to meet their target markets.

It can be concluded that Croatian fashion designers are aware of the lack of marketing knowledge and therefore they engage marketing agencies and consult marketing experts to prepare their marketing activities and help them in market research in the most cases.
When considering marketing activities and strategies, it can be concluded that all respondents have their own Web sites and contact their target market through social media (e.g., Facebook, Twitter…). Their main promotion is presence at fashion shows where they present their upcoming fashion collections. As very important way of promotion they find presenting their work in fashion magazines (e.g., Grazia, Cosmo, Elle…) and celebrities wearing their designed clothing while attending various events. As the most favorite way of promotion they highlighted personal recommendation.

The findings of the research suggest that there is a lot of space for improving marketing as a strategy and enhance marketing activities in Croatian fashion industry. As a few respondents stated, the economic situation in Croatia and in the Croatian fashion industry is pretty bad while there are no current investments in Croatian fashion industry. It can be concluded that there is an area for taking initiatives by Croatian fashion designers in order to determining appropriate marketing strategy and define the most profitable ways of promotion.

Through SWOT analysis the main strengths were defined as creativity of Croatian fashion designers; as weakness - under-investment in domestic labour and small market; as opportunity - investing in the promotion at the Croatian market and entering European market and as threats - expensive raw materials and cheaper labor from neighboring countries.

Potential limitations of this study need also to be acknowledged. First, limitation is relatively small number of fashion designers included in this research. Further study may extend sample in order to get more generalized findings of the study. Second, the study restricts to only fashion designers operating in Zagreb (capital of Croatia) which might be improved by including fashion designers from other regions of Croatia, as well as fashion designers from other Eastern European countries in order to obtain similarities and differences from neighbouring markets.

LITERATURE


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ABSTRACT
In modern society of today’s world emphasis is placed on ensuring financial literacy and financial education of population. Without basic financial knowledge and skills it is not possible to make informed decisions that affect personal and family budget. This paper focuses on finding the level of financial literacy of students in selected economic faculty using a questionnaire survey to determine the existence of a relation between the level of correct answers in the questionnaire and selected socio-demographic characteristics as gender, level of education, year and time study, field of study, completed financial education. The questionnaire tested aspect suitable choice – to know basic information about financial products and to be able to choose the right one under the circumstances. From the survey results, we can conclude that the level of financial literacy of respondents is not sufficient. To increase the level of financial literacy of students one must increase knowledge, skills and competencies through financial education of young economically active people entering into financial situations.

KEY WORDS: Financial Literacy, Financial Education, Hypothesis, Mann-Whitney Test.

1. INTRODUCTION
In today’s society, the emphasis is on the individual learning, which enables the individual to respond effectively to the changing economic environment and personal events. There is increasing requirement to provide literacy of the population in areas that affects its common lives. One of the literacy types is the financial literacy. Young man usually interferes with the world of finance in different situations of life. If we have enough knowledge about this world, it becomes interesting to us, we are able to orient in this world, move, we can overcome more easily crisis situations, we are able to see our perspective, we can plan for the future and feel secure in it. Money is a necessary means to satisfy the needs of the population and practically each of us faces the financial products during the whole life. People many times face the difficult situation in financial market. On the one hand, they meet with many financial products, from which they can choose but on the other hand, they do not understand many times these products and are exposed to a risk that the inappropriate selection will worsen their financial situation. Especially young people are often willing to put their savings into risky products with the prospect of high profits, or take a high mortgage and do not consider whether they will be able to pay back in the future. One of the ways to prevent this negative phenomenon, is to educate the population in the financial sphere to become financially literate.

Nowadays, the topic of financial education in the context of financial literacy is very actual and much attention is devoted to it. Financial literacy is mentioned in numerous professional publications, for example (Koleničová, 2011; Kovalčíková, 2011; Lusardi, 2014; Lusardi, 2010; PISA, 2012; Šepeka, 2011; Šlosár, 2011).

The main aim of our paper was to determine the financial literacy of university students in selected Faculty of economics. We examined whether the level of correct answers of students depend on individual socio-demographic characteristics. At the chosen significance level, we tested the null hypothesis versus the alternative hypothesis.

The overall null hypothesis $H_0$: number of correct answers of students is independent of socio-demographic characteristics.

The alternative hypothesis $H_1$: number of correct answers of students is not independent of socio-demographic characteristics.

The core of the paper consists of four subsections. The first subsection explains the concept of National standard of financial literacy and financial literacy. The second subsection provides a specific test of financial literacy. The third and fourth subsections devoted to the result of the test of financial literacy.
2. FINANCIAL LITERACY

2.1. National standard of financial literacy and financial literacy

Following the documents of the European Union regarding the increasing financial literacy in Slovakia, the Ministry of Education of the Slovak Republic in March 2009 approved the National standard of financial literacy version 1.0 for implementation into state education programs (Národný standard finančnej gramotnosti, 2008). National standard of financial literacy is an open document stating knowledge, skills and experience which the teachers and pupils should dispose with in order to be able to continuously expand their knowledge on personal finance as their responsibilities an opportunities will be changing. National standard of financial literacy describes the minimum requirements for financial literacy of graduates through acquired competencies.

According to the national standard of financial literacy financial literacy is the ability to use knowledge, skills and experience to effectively manage their own resources in order to ensure lifelong financial security for themselves and their households. Financial literacy is the term for a state of continuous development, which allows each individual to respond effectively to new personal events and constantly changing economic environment. Financial literacy is understood as the ability to handle efficiently the finances in everyday situations. It is also understood as the capacity to use financial knowledge, skills and experience in the effective management of their funds, the main aim is to provide lifelong financial reinsurance for themselves and their families.

2.2. Questionnaire survey of financial literacy

The questionnaire survey we conducted at the beginning of summer semester of the academic year 2013/2014 during a lecture of the subject Mathematics at the Faculty of Economics, Matej Bel University in Banská Bystrica. The basic sample consisted of students of bachelor study, who had enrolled subject Mathematics in the current semester. 329 students have been surveyed. They attended the first lecture in Mathematics, equivalent to 60% of students from the basic set.

The questionnaire tested aspect of appropriate selection, so to know basic information about financial products and know how to choose the right one under the stated circumstances.

Questionnaire content is divided into two parts – one part to detect financial literacy and socio-demographic part. The questionnaire consisted of 17 questions (including socio-demographic).

TEST OF FINANCIAL LITERACY

For each task select only one answer (option), which you think is correct and circle it.

1. If you put € 100 into a bank account for two years with an annual interest rate of 10% and interests are credited to your original deposit once a year, how much will you have on your account after two years? (Do not consider bank charges or taxation of interest.)
   a) On your account there will be 110 €,
   b) On your account there will be 120 €,
   c) On your account there will be 121€.

2. You want to put your savings to the bank for one year. Which of the following offers is more convenient for you (which will bring greater appreciation of the deposit)?
   a) One year term deposit with an annual interest rate of 10%,
   b) Repeated 3 months term deposit with an annual interest rate of 9.95%,
   c) Both offers are equally convenient.

3. The Bank offers for one year term deposit annual interest rate of 1%. If the expected inflation rate is 2%, what will be the purchasing power of your savings in one year?
   a) Higher than today,
   b) Lower than today,
   c) The same as today.
4. When choosing a mortgage the Bank offers two possible interest rates, fixed for 3 years at 4% per annum, and fixed for 5 years at 4% per annum. If there is expected decline of interest rates, which of the two options is better for you?
   a) The fixed rate for 3 years,
   b) The fixed rate for 5 years,
   c) The two options are equally convenient.

5. You want to take the credit of € 20,000 for three years. Which offer is the best for you?
   a) The annual interest rate of 5%, while the annual percentage rate of charge is 6.5%,
   b) The annual interest rate of 4%, while the annual percentage rate of charge is 6.75%,
   c) The annual interest rate of 5%, with the annual percentage rate of charge is 7%.

6. Which of the government bond is riskier according to you?
   a) State bond with an annual coupon of 2.5% and a maturity of 10 years,
   b) State bond with an annual coupon of 8.5% and a maturity of 10 years,
   c) The risks are comparable for both state bonds.

7. What is a bond?
   a) A bond that ensures equity stake in the company or firm,
   b) A bond issued by debtor who undertakes to pay the borrowed money according to predetermined rules,
   c) A bond expressing the capital share.

8. The debit card is a payment card which:
   a) is issued to a current account and allows you to draw your own money which is in the current account,
   b) is issued to a current account with a given interest-free limit of credit,
   c) has given credit limit granted by the bank.

9. Credit card is a payment card which:
   a) is issued to a current account and allows you to draw your own money which is in the current account,
   b) is issued to a current account with given interest-free limit of credit,
   c) has given credit limit granted by the bank.

10. What is an overdraft?
    a) Account in which the money bear higher interest rates than the current account,
    b) Bank services to the current account, which allow the customer to draw money from the account, even if that account does not have sufficient cash,
    c) The bank indicator, which informs about the status of funds on a savings account.

11. What is the difference between foreign exchange and foreign currency?
    a) Foreign exchange are non-cash money in foreign currency and the currency is cash money in foreign currency,
    b) Foreign exchange is cash money in foreign currency and foreign currency are non-cash money in foreign currency,
    c) Foreign exchange are non-cash money in foreign currency and the currency is cash money in local currency.

12. The amount of contributions to health and social funds (health, pension, guarantee, accident, unemployment insurance) is insurance
    a) Voluntary,
    b) Required and given by law,
    c) Required only for entrepreneurs.

13. Education (I have completed)
    a) High School,
    b) Special High School of Economics,
    c) Secondary vocational school other than economics,
    d) Conservatory.
14. In my present study I have come across with financial education.
   a) Yes, at high school,
   b) Yes, at college,
   c) Yes, even at high school and college,
   d) No.

15. I am a student of bachelor study degree:
   a) 1st year,
   b) 2nd year,
   c) 3rd year.

16. My study programme is:
   a) Tourism,
   b) Economics and Corporate Management,
   c) Finance, Banking and Investment,
   d) Regional Development and Public Administration,
   e) Public Economics and Administration.

17. Sex:
   a) Male,
   b) Female.

2.3. The partial hypotheses

We examined whether the level of correct answers of students depend on individual socio-demographic characteristics. At the chosen significance level, we tested the null hypothesis versus the alternative hypothesis.

The overall null hypothesis \( H_0 \): number of correct answers of students is independent of socio-demographic characteristics.

The alternative hypothesis \( H_1 \): number of correct answers of students is not independent of socio-demographic characteristics.

From the total hypothesis the partial hypotheses emerged to verify them we used the following non-parametric tests and coefficients: Mann-Whitney Test, Kruskal-Wallis Test, Chi-Square Tests, Monte Carlo Test, Spearman’s coefficient – nonparametric correlations (Anděl, 2007; Venables, 1999).

We examined whether the level of correct answers depends on the form of study (full-time / part-time). At the chosen significance level, we tested the null hypothesis versus the alternative.

Partial null hypothesis \( H_0 \): number of correct responses is independent from the form of study (full-time / part-time).

The alternative hypothesis \( H_1 \): number of correct answers is not independent from the form of study (full-time / part-time).

To verify the hypothesis, we used a nonparametric test, Mann-Whitney test. (Table1.)

**Table 1.** Mann-Whitney test - the form of study

<table>
<thead>
<tr>
<th>Test Statistics</th>
<th>number of correct</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mann-Whitney U</td>
<td>7041,500</td>
</tr>
<tr>
<td>Wilcoxon W</td>
<td>45822,500</td>
</tr>
<tr>
<td>Z</td>
<td>-0.077</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>.939</td>
</tr>
</tbody>
</table>

Source: Authors
From the SPSS output we see that $p$-value of the test is 0.939, which is not less than 0.05, so we do not reject the $H_0$, the number of correct answers of students is independent from the form of study.

We examined whether the level of correct answers depend on gender. At the chosen significance level, we tested the null hypothesis versus the alternative.

Partial null hypothesis $H_0$: the number of correct answers is independent from gender.

The alternative hypothesis $H_1$: the number of correct answers is not independent from gender.

To verify the hypothesis, we used a nonparametric test, Mann-Whitney test. (Table 2.)

**Table 2.** Mann-Whitney test - gender

<table>
<thead>
<tr>
<th>Test Statistics</th>
<th>number of correct</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mann-Whitney U</td>
<td>3065.500</td>
</tr>
<tr>
<td>Wilcoxon W</td>
<td>25010.500</td>
</tr>
<tr>
<td>Z</td>
<td>-3.115</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>,002</td>
</tr>
<tr>
<td>Monte Carlo Sig. (2-tailed)</td>
<td>,002</td>
</tr>
<tr>
<td>99% Confidence Interval</td>
<td>Lower Bound</td>
</tr>
<tr>
<td></td>
<td>Upper Bound</td>
</tr>
<tr>
<td>Monte Carlo Sig. (1-tailed)</td>
<td>,001</td>
</tr>
<tr>
<td>99% Confidence Interval</td>
<td>Lower Bound</td>
</tr>
<tr>
<td></td>
<td>Upper Bound</td>
</tr>
</tbody>
</table>

a. Based on 10000 sampled tables with starting seed 484067124.
b. Grouping Variable: OT17

From the SPSS output we see that $p$-value of the test is 0.002, which is less than 0.05, therefore the hypothesis $H_0$ is rejected, the number of correct answers of the students is not independent from gender. The number of correct answers depend on gender, men reached better results than women.

We examined whether the level of correct answers depends on the year of study (first, second, third). At the chosen significance level, we tested the null hypothesis versus the alternative.

Partial null hypothesis $H_0$: number of correct responses is independent from the year of study.

The alternative hypothesis $H_1$: number of correct answers is not independent from the year of study.

To verify the hypothesis, we used a nonparametric test, Spearman’s Correlation Coefficient. (Table 3.)

**Table 3.** Spearman’s Correlation Coefficient - the year of the study

<table>
<thead>
<tr>
<th>Correlations</th>
<th>number of correct</th>
<th>OT15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spearman’s rho</td>
<td></td>
<td></td>
</tr>
<tr>
<td>number of correct</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Correlation Coefficient</td>
<td>1.000</td>
<td>-.121</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.</td>
<td>.056</td>
</tr>
<tr>
<td>N</td>
<td>252</td>
<td>251</td>
</tr>
<tr>
<td>OT15</td>
<td>Correlation Coefficient</td>
<td>-.121</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.056</td>
<td>.</td>
</tr>
<tr>
<td>N</td>
<td>251</td>
<td>251</td>
</tr>
</tbody>
</table>

Source: Authors
From the SPSS output we see that the value of the test is 0.056, which is not less than 0.05, that is, not reject $H_0$, the number of correct answers of students independent of the study.

We examined whether the level number of correct answers depend on study program (Tourism, Economics and Corporate Management, Finance, Banking and Investment, Regional Development and Public Administration, Public Economics and Services). At the chosen significance level, we tested the null hypothesis versus the alternative.

Partial null hypothesis $H_0$: number of correct responses is independent from the study program.

The alternative hypothesis $H_1$: number of correct answers is not independent from the study program.

To verify the hypothesis, we used a nonparametric test, Chi-Square Test. (Table 4.)

Table 4. Chi-Square Test - the study program

<table>
<thead>
<tr>
<th>Chi-Square Tests</th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>54,642</td>
<td>40</td>
<td>0,061</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>60,865</td>
<td>40</td>
<td>0,018</td>
</tr>
<tr>
<td>Fisher’s Exact Test</td>
<td>51,146</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>,293</td>
<td>1</td>
<td>5,588</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>251</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. 36 cells (65,5%) have expected count less than 5. The minimum expected count is ,19.
b. Based on 10000 sampled tables with starting seed 1335104164.
c. The standardized statistic is ,542.

Source: Authors

From the output of the SPSS, we found that the value of the test is 0.061, which is not less than 0.05 so we do not reject $H_0$, the number of correct answers of students is independent from the study program.

To verify the hypothesis, we used a nonparametric test, Kruskal-Wallis test. (Table 5.)

Table 5. Kruskal-Wallis test - the study program

<table>
<thead>
<tr>
<th>Test Statistics$^b,c$</th>
<th>number of correct</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-Square</td>
<td>18,282</td>
</tr>
<tr>
<td>df</td>
<td>4</td>
</tr>
<tr>
<td>Asymp. Sig.</td>
<td>0,001</td>
</tr>
<tr>
<td>Monte Carlo Sig.</td>
<td></td>
</tr>
<tr>
<td>Sig.</td>
<td>0,001$^c$</td>
</tr>
<tr>
<td>99% Confidence Interval</td>
<td></td>
</tr>
<tr>
<td>Lower Bound</td>
<td>0,000</td>
</tr>
<tr>
<td>Upper Bound</td>
<td>0,002</td>
</tr>
</tbody>
</table>

a. Based on 10000 sampled tables with starting seed 562334227.
b. Kruskal Wallis Test
c. Grouping Variable: OT16

Source: Authors

From the SPSS output we see that the value of the test is 0.001, which is less than 0.05, therefore the hypothesis $H_0$ is rejected and accept the alternative hypothesis, the number of correct students’s answers is not independent from the study program.

Using the Mann-Whitney test, we verified the hypothesis for all pairs of study programs.

In one case the value was less than 0.05, namely 0.003, so the hypothesis $H_0$ is rejected and we accept the alternative hypothesis, the number of correct students’s answers is not independent from the study program Economics and Corporate Management and Finance, Banking and Investment.

Students of the program Finance, Banking and Investment achieved better results. (Table 6.)
We examined whether the level number of correct answers depends on the completed financial education (completed / not completed). At the chosen significance level, we tested the null hypothesis versus the alternative.

Partial null hypothesis $H_0$: number of correct responses is independent from achieved financial education.

The alternative hypothesis $H_1$: number of correct answers is not independent from the completed financial education.

To verify the hypothesis, we used a nonparametric test, Spearman’s Correlation Coefficient. (Table 7.)

From the SPSS output we see that $p$ - value of the test is 0.002, which is less than 0.05, therefore the hypothesis $H_0$ is rejected and we accept the alternative hypothesis, the number of correct students’ answers is not independent from the completed financial education. Better results were achieved by students who have come across financial education during their study.

Table 7. Spearman’s Correlation Coefficient - financial education

<table>
<thead>
<tr>
<th>Spearman’s rho</th>
<th>Correlations</th>
<th>OT14an</th>
<th>number of correct</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Correlation Coefficient</td>
<td>1,000</td>
<td>,167**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.</td>
<td>,002</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>329</td>
<td>329</td>
</tr>
<tr>
<td>number of correct</td>
<td>Correlation Coefficient</td>
<td>,167**</td>
<td>1,000</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>,002</td>
<td>.</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>329</td>
<td>329</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).

Source: Authors
Table 8. Chi-Square Test - the education level

<table>
<thead>
<tr>
<th>Chi-Square Tests</th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>50,710</td>
<td>33</td>
<td>.025</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>47,864</td>
<td>33</td>
<td>.046</td>
</tr>
<tr>
<td>Fisher’s Exact Test</td>
<td>58,869</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>3,258†</td>
<td>1</td>
<td>.071</td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>328</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. 29 cells (60.4%) have expected count less than 5. The minimum expected count is .00.
b. Based on 10000 sampled tables with starting seed 2000000.
c. The standardized statistic is 1,805.

Source: Authors

From the output of SPSS, we found that p-value of the test is 0.025, which is less than 0.05, therefore the hypothesis H₀ is rejected and we accept the alternative hypothesis, the number of correct students’ answers is not independent from the study program.

To verify the hypothesis, we used a nonparametric test, Kruskal-Wallis test. (Table 9.)

Table 9. Kruskal-Wallis test – the education level

<table>
<thead>
<tr>
<th>Test Statisticsa,c</th>
<th>number of correct</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-Square</td>
<td>18,895</td>
</tr>
<tr>
<td>df</td>
<td>3</td>
</tr>
<tr>
<td>Asymp. Sig.</td>
<td>.000</td>
</tr>
<tr>
<td>Monte Carlo Sig.</td>
<td>Sig.</td>
</tr>
<tr>
<td>99% Confidence Interval</td>
<td>Lower Bound</td>
</tr>
<tr>
<td></td>
<td>Upper Bound</td>
</tr>
</tbody>
</table>

a. Based on 10000 sampled tables with starting seed 334431365.
b. Kruskal Wallis Test
c. Grouping Variable: OT13

Source: Authors

From the SPSS output we see that p-value of the test is 0.000, which is less than 0.05, therefore the hypothesis H₀ is rejected and we accept the alternative hypothesis, the number of students’ correct answers is not independent from the study program.

Table 10. Mann-Whitney test - the education level

<table>
<thead>
<tr>
<th>Test Statisticsb</th>
<th>number of correct</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mann-Whitney U</td>
<td>3063,000</td>
</tr>
<tr>
<td>Wilcoxon W</td>
<td>3924,000</td>
</tr>
<tr>
<td>Z</td>
<td>-1,992</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>.046</td>
</tr>
<tr>
<td>Monte Carlo Sig. (2-tailed)</td>
<td>Sig.</td>
</tr>
<tr>
<td>99% Confidence Interval</td>
<td>Lower Bound</td>
</tr>
<tr>
<td></td>
<td>Upper Bound</td>
</tr>
<tr>
<td>Monte Carlo Sig. (1-tailed)</td>
<td>Sig.</td>
</tr>
<tr>
<td>99% Confidence Interval</td>
<td>Lower Bound</td>
</tr>
<tr>
<td></td>
<td>Upper Bound</td>
</tr>
</tbody>
</table>

a. Based on 10000 sampled tables with starting seed 1502173562.
b. Grouping Variable: OT13

c. Source: Authors
Using the Mann-Whitney test, we verified the hypothesis for all pairs of completed education.

In one case p – value was less than 0.05, namely 0.046, so the hypothesis H₀ is rejected and we accept the alternative hypothesis, the number of correct students’s answers is not independent from achieved education level. (Table 10.) Dependence of correct answers was confirmed between secondary vocational schools of economic and non-economic study program. Better results were achieved by students from secondary business schools.

2.4. Research findings

The part to detect the financial literacy contained 12 questions in total. Students chose one correct answer from the three options.

The following chart indicates the percentage of correct answers to each question. (Figure 1.)

**Figure 1.** Percentage number of correct answers to each question.

![Percentage number of correct answers to each question.](source: Authors)

The highest success was achieved by students on issues related to the amount of contributions to fund health and social insurance, and return of the deposit in relation to inflation. A large group of respondents can not distinguish between credit and debit cards as well as gaining the interest on deposits for more than one year causes the problems.

Respondents achieved in the test of financial literacy 62.5% success. More than 80% of respondents answered correctly only the questions related to contributions to fund health and social insurance, and inflation. Not even half of the respondents could correctly answer questions related to credit and debit cards, and the difference between simple and compound interest. Only 3% of students answered correctly on all twelve questions related to financial literacy. The level of correct answers in the questionnaire depends on gender, field of study, financial education, and education level.

We were also finding out how many students answered correctly for the number of questions. The percentage/ accomplishment of the test was 62.5% strength. Students in average answered correctly 7.5 questions. Only 3% of the students answered correctly all 12 questions of the test. (Figure 2.)
From the survey results, we can conclude that the level of financial literacy of respondents is not sufficient. Increasing the level of financial literacy of students can be achieved by increasing knowledge, skills and competencies through financial education, so the young economically active people would not get into financially unfavorable situations.

Lately there have been made many public surveys and statistics on financial literacy level of the population in selected countries. The results of our survey on financial literacy are very similar to the results of comparable surveys in selected countries. Surveys of financial literacy are interested in the field of investment and the risks caused by them, mutual funds, loans, deposits, deposit cards and inflation, and the repayment obligations. Some of the findings based on these surveys are significantly unfavourable. Evaluation of surveys show very low levels of citizens’ knowledge about financial matters in each country, regardless of the level of economies. Insufficient level of financial literacy is a global problem. Residents do not understand the functioning of financial products, have no knowledge of life insurance contracts, can not operate with securities.

3. CONCLUSION

Our aim was to determine the financial literacy of college students, so that we can soon develop innovative textbooks from Financial Mathematics, which would facilitate the implementation of National standards of financial literacy version 1.0 into the curriculum of mathematics in secondary schools and to compile a collection of worksheets with specific application tasks and assignments that enable students to acquire knowledge in financial mathematics. Solution of application tasks can supply missing knowledge of financial mathematics education, to motivate the students, to increase their interest in financial education and to increase the knowledge and thus increase the financial literacy of students.

ACKNOWLEDGEMENTS

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LITERATURE


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THE ATTITUDES OF ELDERLY CONSUMERS TOWARDS POLISH AND FOREIGN FOOD PRODUCTS

MARCIN AWDZIEJ
JOLANTA TKACZYK
DARIUSZ WŁODAREK

ABSTRACT
In the literature on consumer ethnocentrism it is often assumed that elderly consumers, due to their conservatism, are more ethnocentric than younger ones. However, this assumption is based on rather mixed and confusing empirical evidence. To challenge this assumption, the authors conducted a survey to investigate the ethnocentrism level of elderly consumers in regards to food products. In particular, the authors were interested in the overall level of ethnocentrism of buyers aged 60 years and older, and the level of ethnocentrism in relation to food products.

To validate the research question, the authors conducted PAPI and CAWI surveys. The convenient sample consisted of 435 respondents, classified into 4 groups. The first two groups included “seniors”- above 60 years old, who were students of so called “Third Age” universities in Warsaw (135 respondents) and Sokółw Podlaski (43 respondents; this group was included to control the location factor). The third group comprised 121 young adults (students of Kozminski University). The fourth group included 125 adults (professional courses students of Kozminski University). The overall level of ethnocentrism was measured with modified CET Scale (CETSCALE, Consumer Ethnocentric Tendency Scale) (Shimp and Sharma, 1987). Attitudes towards Polish and foreign food products were measured with the scale proposed by the authors.

The results of the study revealed that elderly consumers’ ethnocentrism is insignificantly higher than younger ones, and that the chronological age- at least in the broadly defined food products category- correlates rather weakly with ethnocentrism level.

KEY WORDS: Consumer Ethnocentrism, Food products, Elderly consumers.

1. INTRODUCTION
The construct of ethnocentrism was introduced by Sumner, who defined it as general predisposition of an individual to base evaluations of external phenomena in relationship to standards of a group and individual belongs (Sumner, 1906). In sociology, ethnocentrism is regarded as universal trait, which implies behaviors that are discriminatory in nature (Chinen, 2010). When ethnocentrism level is high, everything perceived as “in- group” is perceived as normative and superior, while “out- group” or “external” as inferior. Ethnocentrism is associated also with cooperative behaviors within a group and reluctance or rejection of cooperative relationships with out-groups (Bizumic and Duckitt, 2008). Shimp and Sharma, who adopted the construct to marketing, defined consumer ethnocentrism as personality trait, founded in generally stable beliefs that dictate what is considered right, or moral, in the context of foreign product purchase (Shimp and Sharma 1987). They argued that consumers favor domestically- produced goods even when not perceiving them as superior. Consumer ethnocentric attitudes seem to direct decision making process towards purchase and consumption of products known or perceived as domestically produced rather than against the foreign ones. Although ethnocentrism is typically linked to discriminatory behaviors, it can be also analyzed as in- group favoritism (Smyczek and Glowik, 2011). This perspective is consistent with anthropological and psychological perspectives that differentiate between ethnocentrism (in- group favoritism) and xenophobia (hostility towards out-group (Brown, 2004). According to Rawwas and Rajendran. strongly ethnocentric consumers tend to advocate domestic products and discount the value of foreign ones (Rawwas and Rajendran, 1996). High levels of consumer ethnocentrism led to overestimations of the value of domestic products, and underestimation of imported ones (Rawwas and Rajendran, 1996). The empirical evidence suggests convincingly that major determinants of ethnocentric tendencies are product category and attributes. When it comes to consumer characteristics, however, the evidence is at least contradictory. This motivated our inquiry into the relationship between consumer characteristics and ethnocentrism with particular emphasis on age and food products.
2. CONSUMER ETHNOCENTRISM AND FOOD PRODUCTS

With the few exceptions, the majority of research on consumer ethnocentrism is dedicated to other than food products (Orth and Fribasova, 2003). Typical objects of investigation were relatively complex product categories such as electronics, apparel and automobiles. Studies investigating food products are rare, with some notable exceptions, such as Orth and Fribasova (Orth and Fribasova, 2003) and Chryssochoidis et al. (Chryssochoidis et al., 2005). Orth and Fribasova found that among various demographic characteristic, age was most significantly linked to consumer ethnocentrism and the resulting consumer choice, supporting the results of the earlier studies.

The majority of empirical evidence, however, focuses on Country of Origin Effect (COO) rather, then on ethnocentrism as such. Food product purchase is considered by most of the authors as not very involving and, therefore, not engaging consumers into long information searching and processing. Since the attribute information is often limited at the point of purchase, one can expect that consumers would base their final decision on price, packaging and COO (Orth and Fribasova, 2003). However, what seems to be somehow ignored in the literature, food consumption is very specific, so these assumptions may be oversimplification. Eating habits reflect not only complex biological processes, but are also culturally, historically and socially determined. Hence, despite their relative low complexity in technical terms, food products consumption represents one of the most complex consumption forms at all, with strong symbolic value and social significance. It is generally agreed that eating habits are characterized by limited rationality, not only because of limited information availability, but also due to strong influence of cultural factors. This can be also questioned, in certain situations at least, when one considers the impact of health consciousness on individual eating patterns. Moreover, in the situations when food is purchased for special occasions, such as major religious holidays or significant social events such as weddings, not only high involvement is to be expected, but also long and intensive planning. In the developed countries, where once-a-week grocery shopping is dominating behavioral pattern, one should also expect relatively high degree of purchase planning. Decisions regarding food purchases are made within social context, like family, and are affected by individual factors such as experiences and knowledge of individuals. On individual level, eating habits are thought to result from consumer socialization process at the early stage of an individual’s development. They tend to emerge in the early age and endure, due to consumer conservatism. Therefore, the preferences towards food products may consolidate in a relatively young age. In result there could be no significant differences between 30 and 70 years old consumers within specific social group. The sense of taste, motivating the choice of food products, is strongly influenced by socio-cultural factors such as family or religion (Gutowska, 2004). When it comes to symbolic properties of food product choice and consumption, there are many complex phenomena involved, such as conspicuous consumption of rare and expensive food products to manifest an individual’s or group’s status. Another phenomena that require, in our opinion, more attention are self-gratification with food products, purchasing expensive or exotic food products as gifts and last, but not least, latest “foodie” fashion, symbolized by celebrity status of chefs and growing interest in cookery.

2.1. Consumer characteristics and ethnocentric tendencies

It is generally agreed that the key factors that strengthen ethnocentric tendencies are product category and attributes. According to Watson and Wright, high level of consumer ethnocentrism may be moderated by specific, desired product attributes (Watson and Wright, 2000). However, within the extant literature on the consumer ethnocentrism, the relationship between consumer characteristics and the ethnocentrism is rather underdeveloped. It is far from clear whether consumer characteristics such as age, gender, and income allow prediction of consumer ethnocentrism levels, and how they moderate decisions (Josiassen et al., 2011). The recent empirical evidence is rather mixed and confusing (Shankarmahesh, 2006). Shankarmahesh discussed six studies that have found older consumer more ethnocentric than younger, and two studies which revealed the opposite relationship. For example, Bannister and Saunders found that younger consumer are more ethnocentric, but they also found attitudes of consumers in the UK became more favorable towards domestic products when their age increased (Bannister and Saunders, 1978). The same mixed results concern the relationship between gender and ethnocentrism. While several studies suggest that female consumers are more ethnocentric, some found no significant differences between genders, and some indicate that men tend to be more ethnocentric (Bannister and Saunders, 1978). Mittal and Tsiros found that female consumers rate imported products more favorably, however, this could be attributed to other factors (Mittal and Tsiros, 1995). Studies by Balabanis et al. and Sharma suggest that men are less ethnocentric than women (Balabanis et al, 2004, Sharma, 1995). Gender may not only affect consumers’ ethnocentric tendencies, but also their propensity to act upon these. This is confirmed by several studies in marketing, which suggest that women are not only more consistent between their attitudes and behaviors, but also between their attitudes and intentions. Josiassen et al. argue that women tend to be more ethnocentric because they tend to be more conformist, conservative and collectively minded, and this general tendency was confirmed by their study (Josiassen et al., 2011).

There is also no agreement regarding the influence of income on consumer ethnocentrism. The general assumption prevailing in marketing literature is that higher income makes consumers less ethnocentric, because with more
disposable income they tend to be more cosmopolitan (Balabanis et al. 2004). Study by Sharma et al. indicated, for example, negative relationship between income and consumer ethnocentrism (Sharma et al., 1995). Han and Terpstra found no income effects, and Tan and Farley, and Balabanis et al. reported positive relationship (Han and Terpstra, 1988; Balabanis et al., 2004). The recent study by Jossiasen et al. found no significant influence of income on consumer ethnocentric tendencies (Jossiasen et al. 2011).

The review of literature on consumer characteristics and ethnocentrism supports the claim that the empirical evidence is inconsistent and mixed (Shankarmoosh, 2006). In fact, many studies of consumer ethnocentrism continuously repeat the errors that add to the confusion. These were brilliantly analyzed by Jossiasen et al. They critically evaluated available studies and found that the authors not only conduct research on young adults (students), applying product-country images as a proxy for consumer ethnocentrism, and erroneous cross-referencing without careful verification of the veracity of earlier interpretations (Jossiasen et al., 2011). This, in result, limits not only our understanding of how consumer demographics allow predicting consumer ethnocentrism, but also managerial relevance of research in this area.

2.2. The meaning of “elderly”. Chronological age and consumer ethnocentrism

The term “elderly consumers”, which is widely used in marketing literature and practice, is scientifically imprecise and ambiguous, as it used to embrace very diverse and heterogeneous groups of consumers. The definition of “elderly” is based typically on certain chronological age, that allows inclusion of a person into this segment. We adopted WHO’s definition, which assumes that the beginning of an old age is 60 years. The reason for this is that WHO recognizes three periods of old age: “young-old” (60-74 years), “old” age (75-89), and “old-old” (longevity; above 90), that reflect, in general, varying mental and physical states of 60+ people. This taxonomy is applied to people in very different biological age, that is varying psychophysical state (Roszkowski, 2010). Chronological age is widely applied independent variable both in academic research and marketing practice as segmentation criterion. From the perspective of business practice, chronological age is one of the most important consumer characteristic, used to differentiate markets and segments for huge number of products and service. The problem is, however, that chronological age is not identical with a person’s cognitive age, which is how old a person feels to be, and with which age group he or she identifies (Bernhart and Penalosa, 2013). One of the reasons such a gap exists is the above mentioned biological age, defining consumer’s cognitive and physical abilities. The literature, in fact, confirms that the population of consumers declaring to feel exactly in their chronological age is rather small (Gonzalez et al., 2008). Therefore, chronological age as main criterion to consider a person to belong to “elderly” segment, has its limitation. It is difficult yet to be replaced, not to mention that the, investigation into consumers’ cognitive age requires additional psychometric study. However, there is not commonly accepted chronological age that would allow to include a consumer into “elderly” segment. One can find various age thresholds, spanning even from 49 years of age. The most common are “55+” or “65+”. Tynan and Drayton suggest that the moment when a consumer retires is more useful than the chronological age itself (Tynan and Drayton, 1998). The moment of transition from employment into retirement implies significant change of a lifestyle, not to mention of an income and consumption structure. Bernhart and Penalosa propose that the latter one itself is much better denominator of an “old” age than employment status (Bernhart and Penalosa, 2013). Although there is no commonly accepted chronological age of transition into “elderly” segment, at least its heterogeneity of it is widely recognized, which calls for more sophisticated approach to segmentation. For example, in the UK in the 55+ age group there were 8 segments identified, based on lifestyle criterion. Moreover, the determinants of elderly self-identification can be health and financial status, marital status, and cognitive age. To sum up, it is still not definitely agreed who should and could be classified as “older consumer”.

Regardless of the definitions, elderly consumer are marginalized both in academic discourse and practice of marketing. The above signalized lack of commonly agreed definition of chronological age allowing inclusion of a consumer into elderly segment is one of the symptoms of this marginalization. The other one is rather limited number of publications focusing on elderly consumers. It is surprising in the light of intensive public debate about ageing of societies in the developed countries and its consequences for economic and welfare systems. Although the number of publications grows, and elderly consumers are even considered in some academic textbooks on consumer behavior (Solomon et al., 2010), the analysis of ageing and elderly consumers is seldom free from negative stereotyping or simplifications. Social sciences in general are dominated by negative vision of ageing as unproductive and decline period of life. The discourse in the field of marketing does not avoid this, neither. It repeats stereotypes, perpetuating negative construction of old age as such. Many authors implicitly assume that elderly consumers have limited intellectual and physical abilities, cannot learn new skills, they are conservative, vulnerable and helpless. An example of such approach is found in the well-known concept of the family life cycle, in which elderly consumers are depicted as lonely or living with a spouse, not as active members of more extended groups. They are also considered to belong to “laggards” group in the innovation diffusion model, that is the last to adopt any new technologies emerging in the market.
Early literature on elderly consumers focused on challenges and problems in consumption process resulting from ageing, such as cognitive decline, vulnerability, dependency on others and isolation to name a few. Empirical studies conducted in the 90ties of the last century concentrated on issues such as needs for support from others, market alienation, vulnerability to unethical marketing practices, or limitation of cognitive abilities. In the first decade of the 21st century this repertoire was considerably extended with inquiry into such issues as elderly consumers’ loyalty towards brands, vendor patronizing, behavior in the context of specific product or service categories, or impact of promotional activities. Yet, when compared with the number and scope of publications devoted to youth segment, the literature on elderly consumers is still rather limited. The majority of the authors seem to implicitly assume that age affects the way people consume. However, the opposite relationship is usually ignored, that is how consumer behavior affects the perception and understanding of “old age”. At the end the focal point seems to be the question of self-identification of these consumers who passed the arbitrary chronological age of 50, 60 or 65 years. All identities consumers adopt are subject to change in time and result from social discourse. Empirical evidence suggests that the age identity is one of the most incoherent and unstable, and is determined with specific social context. People tend not to identify themselves with the age cohort they belong to due to their birthdate, even if their social environment classifies them to these groups. An interesting study by Schau at al. revealed that retired consumers identified themselves more often as belonging to specific ethnic or professional group rather than to a specific age cohort (Schau et al. 2009).

Almost all publications devoted to elderly consumers point the fact that they are ignored by companies. Tynan and Drayton identified the main reasons behind this marginalization: the supposed lack of spending power, negative stereotypes of elderly as physically and mentally weaker, and lack of relevant and reliable information about elderly consumers’ behavior (Tynan and Drayton, 1988). Further, this goes in line with over-preoccupation with younger, allegedly richer and healthier consumers, more exciting from business’ perspective. However, the sources of ‘excitement’ with young consumers may well be applied to elderly.

As 60+ population in the developed countries grows, so does the importance of this age group from commercial perspective. Adopting only demographic criteria for segmentation, and chronological age in particular, will not only result with imprecise estimates of this market’s size, but will also ignore the heterogeneity of this consumer group. For instance, there could be no considerable difference between well educated, active and healthy 60 years old woman and 45-years old one with similar psychographic characteristics. Moreover, a 70-years old man from metropolitan area can live more satisfying and more socially active life than 35-years old, unemployed man from economically impoverished area of the same country. Another issue, which becomes apparent when one considers the gap between cognitive and chronological age, is whether elderly wish to be treated as “old” at all. In the situation when the majority of elder consumers do not identify themselves with “old”, and perceive as younger than they are in the chronological age terms, they may reject products and services targeted at them. The same may apply to promotional claims that exploit negative stereotypes of old people, who can be perceived as offensive.

The inquiry into consumers’ ethnocentrism focuses predominantly on younger consumers (Sajdakowska, 2003). Most of the authors seem to assume implicitly that younger consumers tend to be less ethnocentric than the older ones. This proposition is not sufficiently supported empirically, though. It seems that it is based on assumption, that the elder a consumer is, the more conservative she/he becomes. This assumption seems to made by Chryssochoidis et al., who surveyed relatively young and better educated consumers (Chryssochoidis et al. 2005). Although their study provides many important insights into the problem of consumer’s ethnocentrism towards food products, their value is limited due to mistakes typical to studies of the problem, as summarized by Jossiassen et al. (Jossiassen et al., 2011). These include: surveying mainly younger or young consumers (predominantly students), equating ethnocentrism with Country of Origin Effect and, last but not least, rather inconsistent literature analysis. Considering the latter one, Jossiassen et al. identified at least 8 different publications proving that elder consumers are more ethnocentric than younger ones, almost the same number of publications supporting exactly the opposite view, and at least one author who presented contradictory conclusions in the same work. Therefore, it is safe to state, that the results of empirical research investigating the relationship between chronological age and ethnocentrism are at least inconclusive.

3. AIM AND METHODOLOGY

The aim of the study was the identification of consumer ethnocentrism level towards food products, as well as their attitudes towards their purchase and consumption. In particular, we were interested on the relationship between age, gender and income of respondents. Given the contradictory empirical evidence reported in marketing literature, we propose a set of hypotheses regarding the role consumer characteristics on consumer ethnocentric tendencies:

H1: The level of consumer ethnocentrism grows with consumer age.

H2: The level of consumer ethnocentrism depends on consumer’s gender.

H3: The level of consumer ethnocentrism decreases with growth of consumer’s income.
To validate the above formulated research hypotheses we conducted PAPI and CAWI surveys. The convenient sample consisted of 435 respondents, classified into 4 groups. The first two groups included “seniors” - above 60 years old (age average - 67.3, age median 67), who were students of so called “Third Age” universities in Warsaw (135 respondents) and Sokolów Podlaski (43 respondents; this group was included to control the location factor). The third group comprised 132 young adults (students of Kozminski University) (age average 21.3, age median 21). Fourth group included 125 adults (professional courses students of Kozminski University) (age average 35.5, age median 33.5). In the “senior” group 91% were women, 5%- men, which reflects, in our opinion, the general demographic tendency in this age group. In the third and fourth groups women constituted 54% respondents, men- 45%. The survey was conducted in November 2013 and March 2014.

Table 2. The characteristic of the respondents; N=435

<table>
<thead>
<tr>
<th>Seniors (60+; Warsaw)</th>
<th>Seniors (60+; outside Warsaw)</th>
<th>Young Adults (20-25 years)</th>
<th>Adults (26-59 years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>135</td>
<td>43</td>
<td>132</td>
<td>125</td>
</tr>
</tbody>
</table>

Source: Own research.

The questionnaire consisted of three parts. The first included modified CET Scale (CETSCALE, Consumer Ethnocentric Tendency Scale) (Shimp and Sharma, 1987). CET scale was modified to 10 questions (maximum scale’s value was 50). Five – level Likert item scale was used (where “1” meant “Strongly disagree” and “5” meant “Strongly agree”). The modification were necessary to facilitate elder respondents participation, as suggested by the results of the pilot study. The second part of the questionnaire included questions relating to consumers’ attitudes towards foreign and Polish food products, proposed by authors. No specific food products category was specified, since the aim of the study was to analyze the general ethnocentric tendency (general categories such as “food”, “food products” and “dishes” were used interchangeably). No specific country of origin was indicated in this part of the questionnaire. Instead “Polish- foreign” dichotomy was employed.

The third part of the questionnaire included questions relating to consumer behaviors, in particular purchasing and consumption of foreign food products. These questions related to issues such as buying, in- home preparation of “foreign” dishes and participating in “thematic” in – store promotions of “foreign” cuisines in the selected retail chains.

4. FINDINGS

The ethnocentrism level was higher and more diversified in the two groups of seniors, where 6 respondents scored maximum value on the scale adopted (50). There was no significant difference between “young adults” and “adults”, where no maximum score was recorded. There was very weak correlation between consumer ethnocentrism level and gender (positive for women r=0,13 p<0,05 and negative for men r=-0,15 p<0,05). There was no correlation between consumer ethnocentrism level and income (r=0,02 p<0.05). Therefore, hypotheses H2 and H3 could not be supported.

Table 2 presents the summary of research findings.

Table 2. Ethnocentrism level in the fours respondents’ groups.

<table>
<thead>
<tr>
<th>Ethnocentrism level</th>
<th>Young adults (20-25 years)</th>
<th>Adults (26-59 years)</th>
<th>Seniors (60+; Warsaw)</th>
<th>Seniors (60+; outside Warsaw)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
<td>22,25758</td>
<td>22,48351</td>
<td>28,78519</td>
<td>34,21429</td>
</tr>
<tr>
<td>Standard deviation</td>
<td>7,969279</td>
<td>8,40899</td>
<td>12,63352</td>
<td>8,691911</td>
</tr>
<tr>
<td>Median</td>
<td>21</td>
<td>22</td>
<td>29</td>
<td>33.5</td>
</tr>
</tbody>
</table>

Source: based on survey results.

Pearson correlation for consumer ethnocentrism and age was weak (r=0,371, p=0.001). Considering, however, other findings, this was the strongest relationship indicated. Additional analysis of averages and medians indicates differences between respondents’ groups. In both cases, ethnocentrism level was higher for “seniors”. This allows to conclude that consumer ethnocentrism level tends to grows with the age, which support hypothesis H1. However, it must be noted that the relationship between age and consumer ethnocentrism is weak.
The attitudes of respondents towards Polish and “foreign” food products are presented on Chart 1.

**Chart 1.** Consumers’ attitudes towards Polish and “foreign” food products (in four groups).

1. Polish food is easier to prepare than foreign.
2. Polish food is healthier than foreign.
3. Polish food contains less harmful substances than foreign.
4. Polish food tastes better than foreign.
5. Polish food is cheaper than foreign.
6. I have good knowledge of Polish food products.
7. Polish food is more accessible in shops than foreign.
8. The quality of Polish food products is adequate to their price.
9. Polish food is easy to consume.
10. Polish food is good for my health.
11. Polish food is natural.
12. Traditional Polish dishes remind me of my childhood.
13. Polish food products have better packaging than foreign ones.
14. Polish food products are more ecological.
15. I find traditional Polish dishes pleasant.
16. Polish dishes are easier to prepare than foreign.
17. Foreign dishes require ingredients that are difficult to find.
18. Foreign dishes are difficult to prepare.

All four groups of respondents agreed that traditional Polish food reminded them of childhood and were well known. Both younger and elder consumer declared pleasure when consuming traditional Polish cuisine, which may suggest influence of psychological factors. “Seniors” perceived preparation of “foreign” dishes difficult, and disagreed that Polish food was more difficult to prepare in comparison to “foreign”. Elder consumers found preparation of “foreign” dishes difficult, which may result from relatively limited knowledge or experience with such. In general, all groups of respondents shared similar attitudes towards Polish food. Packaging of Polish food products was not regarded as better
than “foreign”. The most significant differences were observed between “adults” and “senior” groups, which showed biggest discrepancies in their perception of Polish food’s quality, health benefits, and price. “Adults” disagreed that Polish food products were cheaper, the adequacy of its quality to price, its “naturalness”, and positive impact on health. One may hypothesize that this results from their more extensive shopping and food preparation experiences, compared with the other groups.

Younger respondents (90%) purchase “foreign” food products more likely than “Seniors” (75%). The most popular product categories included fruit, liquors, coffee and tea. When it comes to seniors, the most often purchased “foreign” products were fruit, coffee and vegetables. It must be noted here, that in the case of some food products, some respondents had problems with differentiating “Polish” from “foreign”. One of such products was, surprisingly, olive oil, which was found in some cases as “domestic”. This suggest that an additional study into perception and knowledge of particular product categories, and their country of origin may be necessary. It may be possible that in result of long- term exposure to certain imported food products consumers treat them as “domestic”, or do not apply “foreign” - “domestic” dichotomy in their choice process at all. “Thematic” promotional actions more often attract “young adults” and “adults” then seniors (83% compared to 60%). Trial of “foreign” food by younger respondents was motivated with curiosity, while “seniors” were attracted by price. The most popular foreign cuisine in Poland is Italian, pointed by 91% of respondents as “favorite”; the second choice was Spanish (41%). Among the group of “Seniors” foreign cuisines are less popular. The most popular cuisine is Italian (44%) and French (20%).

5. CONCLUSIONS AND LIMITATIONS

The results of the study suggest that the relationship between the level of consumer ethnocentrism and consumer age is weak. Gender were found not to affect significantly the level of ethnocentrism, and income were found not to affect the level of ethnocentrism at all. In general, ethnocentrism towards food products was found to be weak, yet it showed tendency to grow with consumer age. This confirms the results of some earlier studies, in particular Jossiasen et al. findings on relationship between age and ethnocentrism and the lack of thereof between income and ethnocentrism. Although the relationship between consumers’ age and ethnocentrism towards food products was found to be relatively weak, it nevertheless, supports findings of the research study by Gutkowska, who found ethnocentrism level of Polish consumers to grow with age. Our findings confirm also that in general, high ethnocentrism level in the context of food products is not common. Chronological age, therefore, may not necessarily influence consumer attitudes toward food products, and the resulting behaviors. Strong association between traditional Polish foods or dishes and childhood (a period of life usually idealized) suggest that well know foods evoke strong positive emotions, that later may crystallize as consumer nostalgia. Last, but not least, one should not forget about psychological determinants of taste and dietary preferences. This, in turn, suggest that additional inquiry into contextual, e.g. cultural and social determinants, may provide better insight. One may hypothesize that the ethnocentrism level, at least towards food products, may be similar across all age strata in a particular country. Hence, there may be no need to differentiate marketing activities, when targeting consumers with imported food products, at least when consumer age, income and gender are concerned.

However, there are limitations to the study, that need to be taken into consideration. The main limitation of the research results from the sampling method. The convenient sampling used does not allow for generalization beyond the population of respondents surveyed. The choice of sampling approach was dictated by time and cost limitations. The quality of research conducted was ensured by data and methodological triangulation (4 groups, 1 outside Warsaw, 2 methods of data collection). “Seniors” included in this study were students of so called “Third Age” universities. This is a specific group, taking into consideration their psychographic profile. They tend to be more active, mobile, with more diversified personal interest and in general in better psychophysical condition, contradicting negative stereotypes of the elderly. This may affect their consumer ethnocentrism level, that was found only slightly higher than of the younger respondents. Moreover, research of consumer ethnocentrism towards food products should be extended with investigation of the impact of broader cultural, social and psychological factors on ethnocentric tendencies.
LITERATURE


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COMPARATIVE ANALYSIS OF THE EMOTIONAL AND CULTURAL BRANDING MODELS
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ABSTRACT
In the marketplace of the 21st century, where supply has been exceeding demand for a while now, having a successful brand is the Holy Grail that numerous companies aspire to obtain. A brand has become far more than a combination of names, jingles and logos – it represents the set of emotions evoked in the consumers’ conscience, mind and heart; the powerful trigger which will push masses into not only buying, but also following and worshipping certain products. As for companies, an efficiently managed brand could become the main source of competitive advantages and the starting point for forming a strategic course of a certain company. The crucial purpose of the brand management process is to constantly increase the importance and value of a brand, not only for a company but also for its consumers.

This paper analyzes two different approaches to the process of branding. The emotional branding focuses on the emotional involvement or the emotional connection established between consumers and brands, meaning a consumer’s unique relationship with a brand. In that case, consumers *feel* and experience a brand. Again, personification, interaction, sensorial branding and experiments are the constituents of the dominant branding model of today’s market place – the emotional approach.

Nevertheless, the discipline of branding has not ceased to develop and new theories and practices are constantly infiltrating modern marketing and branding. One of these new models is the cultural model, which isn’t as much a new approach as it is an extension and update of the emotional model. The cultural branding serves to explain the astonishing fact that there are two kinds of highly successful brands – the highly successful ones and the icons, which are always one step ahead of the rest.

KEY WORDS: branding, branding models, cultural approach, emotional approach.

1. INTRODUCTION
In today’s world, where products, markets and industries are subject to constant turmoil and change, a strong brand which is thoughtfully managed can become a major source of competitive advantage and a basis for building the company’s strategy. The term *brand* may refer to a brand name as well as to the design, logo, jingle, slogan, symbol and/or “any other element that differentiates the product or service of a specific company from the products or services offered by its competitors.” (AMA, 2012.).

Brands serve as carriers of certain distinctive features which encourage consumers to choose a specific product and therefore they create added value in the eyes of consumers. The importance of a brand for a company is evident through the many benefits that an established and successfully developed brand brings. In addition to identifying and differentiating the products offered by a company, it also prevents competition from unauthorized copying, diminishes the threat of a (too) high price in the buyers’ purchasing decisions, facilitates the launch and adoption of innovations and new products, and increases the value of the company (Kotler, Keller, 1994). In other words, the power of a brand lies in the impressions and emotions it can evoke in consumers, business partners and the public.

Consumers do not buy products; they buy brands. Furthermore, they do not communicate with anonymous products, but they create relationships with brands. Thus, the brand has become a major weapon in the fight for the consumer; a battle which takes place not only on the market, but largely in the minds of consumers. The companies that manage to survive and thrive in today’s overcrowded market place are the ones who manage to maintain and increase the power of their brands over time. The way the company manages its brand is the deciding factor in its success or failure.

In today’s globalized market, where offer has exceeded demand by far and where innovations drown among thousands of similar generic products, branding has become such an important process that everything that is being sold is being branded - from bottles of mineral water to life insurance policies. The main objective of the processes called branding and brand management is to increase the importance, relevance and brand value over time; both for the company and for its consumers. Specifically, branding and brand management function in almost identical ways. The starting point is creating distinctive, unique and original identity, whose symbols and signals will help consumers create a positive image
of the brand, and, subsequently, decide to follow it, create a relationship with it, identify and engage. On the other hand, while branding implies the creation and establishment of brands, brand management mainly refers to managing already formed brands. Its specific goal is to increase the importance and value of the brand over time, for the company and for consumers, which is done through the implementation of various marketing techniques for the development and expansion of the brand, its products or product lines.

Over the last hundred years the awareness about the importance of brands for a company has largely increased. Furthermore, theoretical and practical knowledge from other disciplines, particularly from psychology, sociology, anthropology and cultural sciences started infiltrating and influencing marketing and business administration practices. This new, more holistic approach to branding enabled a better clarification of important aspects of consumer-to-brand interaction, such as the motivation behind purchasing decisions, the formation of a brand identity through a set of values associated in the consumer’s subconscious, the benefit of engaging consumers’ senses and their desire for new experiences, as well as the profound social and cultural impact that brands may have on the masses.

All of these new aspects to branding, in turn, influenced the formation of various different approaches to branding, such as the conventional (rational), the emotional and the most recent ones, which are viral and cultural branding. Although in some respects fundamentally different, neither approach is considered to be exclusive, but instead each has been developed through supplementing and expanding the previous one and through the addition of new knowledge in practice and theory.

2. THE FOUR MAIN APPROACHES TO BRANDING

According to most authors of branding-related literature, four main different approaches to branding have been developed so far – the conventional, viral, emotional and cultural branding models. Despite existing differences, all four approaches equally accept the basic definition of the brand as something that creates value for the enterprise and consumers and helps differentiate the products of a certain company from those of the competition (AMA, 2012).

The model that has been dominant until the seventies of the 20th century is the one that author D. Holt refers to as mind-share branding, which, for the purposes of this paper, will be referred to under the term conventional branding. It is a cognitive approach based on the assumption that the consumers’ buying decision is primarily rational and that therefore an advertising based on repetition of all the positive characteristics of the product will encourage the consumer to buy it. The focus is always on the usability, functional characteristics and quality of the product and the power of the brand lies in the associations that it evokes in the (rational) mind of the consumer. The main goal is to achieve a constant presence in their minds (Holt, 2004).

With time, marketing experts realized that the conventional approach ignores some of the most important factors that contributed to the increasing importance of branding and the success of some popular brands. These were the emotional involvement of the consumer and his creation of emotional connections with the brand. The conventional model of branding has therefore been expanded and updated with new concepts that are now regarded as crucial for the successful establishment of a brand in the market - personification, interaction, sensory branding and experimental approach. The power of the brand has become equal to the power of emotions it can evoke in the consumers.

Furthermore, the creation and growth of the World Wide Web since the 90s and the invention of smartphones during recent years gave possibilities of rapid transmission of information globally, and contributed to the development of another brand management model called viral branding. Viral branding is mainly focused on creating internet sensations, a story (“buzz”) about the brand which will make it massively popular, especially on social networks. The key is to attain consumers who will share the story among their friends and followers. (Pavlek, 2008.)

Today emotional branding has become the prevailing model used in brand management, but during the last ten years it has been expanded and completed as well. In 2004, American marketing expert Douglas Holt published his book “Iconic Brands - The Principles of Cultural Branding”, which introduced a new branding model, which he named cultural branding.

Holt analyzed several world famous brands, whose popularity and importance grew so much that they have become an integrated part of mass culture, in order to give an answer to the question that marketing experts have been contemplating for a while - if different brands follow the same principles of emotional branding, why do some acquire mass popularity and iconic status, while others do not? Holt’s cultural branding model does not ignore or deny the basic principles of emotional approach. Instead, it uses the already mentioned core elements of emotional branding, further developing and completing them. The fundamental difference between these two approaches is that cultural branding emphasizes the importance of brands as social and cultural phenomena, whose strengths lie in the connections they build with broad masses of consumers, which act as their faithful followers and worshipers. Emotional branding, however, focuses more on the psychological aspect of the individual relationship between a consumer and his favorite brand (Pavlek, 2008).
3. EMOTIONAL vs. CULTURAL BRANDING

First of all it is necessary to clarify the conceptual notions of emotional and cultural branding in order to point out the relationship and differences between these two approaches.

3.1. Emotional branding

The main focus of emotional branding is the emotional connection of the consumer to the brand. When the consumer becomes emotionally connected to the brand, he feels it, experiences it through his own way, but also through social relations and interactions with others, since brands who successfully execute the principles of emotional branding manage to incorporate themselves as part of a specific culture and society and even act as a link between people who are members of a certain culture or group. For example, leather footwear and accessories manufacturer Dr. Martens is an example of a brand that acts as a link between members of alternative subcultures, who immediately recognize each other by their characteristic tall boots with eight or ten holes for laces.

Emotional branding involves four fundamental practices – personification of the brand, interaction of the brand and consumers, involvement and synergy of the consumers’ senses and stimulating their desire for experiences.

Personification is the addition of human traits to brands and is essential in structuring a brand’s identity. A brand that is able to impersonate itself, meaning to create associations of human characteristics in the consumers (sub)conscience, achieves a powerful tool and a basis for differentiation in the minds of consumers (Travis, 2000). Consumers then identify and evaluate these characteristics in order to determine if they correspond to their individual identity and self-image. Thereby, the role of personification is to establish closeness, connection, emotional contact and relationship between the consumer and the brand (Gobe, 2009). A brand can consider itself successfully personified if it manages to achieve that the consumer speaks of him as a person (either positively or negatively). This shows that it is present in the consumers’ minds as well as on the market place. According to Aaker (2000), no one is interested in a product without a strong personality. A brand’s personality is the source of its value because it helps in differentiating it and making it interesting and memorable.

Proponents of emotional branding insist on incorporating consumers as individuals within a community associated to the brand. These communities are mostly created on the Internet, which offers easier and faster exchange of information and a small sense of formalism and discipline. Online communities allow interactive relationships between brands and consumers and serve as a platform for exchanging views, information and opinions.

Moreover, consumers do not generate emotions and experiences through rational thinking, but they arise through stimulation of the five senses - sight, hearing, touch, smell and taste. An individual’s reactions to sense stimulation are instinctive and faster than conscious thought (Pavlek, 2008). In this context, sensory branding is the process that creates the true experience of the brand and it starts by collecting information through the senses, which in turn generates feelings, adventures and experiences.

3.2. Cultural branding

As already mentioned, cultural branding builds on the principles of emotional branding and completes it. However, this model, first explained in the book “How brands become icons” by Douglas B. Holt (2004) through the paradigm of iconic brands, actually represents a broad sociological phenomenon that transcends an individual’s psychological relationship to the brand, which is the focus of emotional branding. Iconic brands are the most successful brands of our time, whose
products achieve stellar rates of sales and profits, who managed to obtain a permanent place in the perception of consumers and create a deep emotional connection. That connection between the consumer and the brand occurs when consumers have a feeling that their favorite brand understands them. Cultural branding introduces three new goals that brands must meet – the creation of myths, the formation of a special identity and a thoughtful management process.

In order to become an icon the brand needs to construct a myth based on an authentic story, which the costumers will believe in, identify with and promote with faith and enthusiasm among others. Iconic brands reached their superior status specifically through the creation of such unique myths, original stories based on different cultural experiences that consumers identify with. The development of such myths was helped by an insightful approach to consumers, which includes an understanding of human desires and fears, as well as various social phenomena and contradictions of contemporary society. Myths must be based on three ground principles - they must be associated with human aspirations and fears, integrated into the brand’s identity and visible through its symbols, and based in the populist world.

The greatest power of iconic brands lies in the fact that consumers start to perceive their identity with their own. In other words, they recognize their own identity in the identity of the brand, since the brand expresses their identity, and therefore they begin to identify with the brand completely. Such identification creates a deeper emotional connection, worship and follow, which is much more than mere affection and closeness with the brand.

A successful, iconic brand bases its identity on the awareness of the similarities of human emotions and motives. Brands icons are aware that individuals’ emotions, even though they are personal and individual, are experienced in a similar manner among individuals all over the world. The desires and fears of a wider population, especially if they belong to the same nation, are in principle quite similar to each other. The reason for that lies in the fact that the desires and fears of individuals are closely associated with the historical, economic, political and natural conditions of a certain country or society.

If it manages to successfully launch and expand its myth as well as to construct an identity for consumers to identify with, the brand can become an icon. However, this does not guarantee that it will succeed in maintaining the icon status or that it will survive in the market. The third element that is required for a brand in order to remain an icon is an adequate cultural brand management. Thus, in contrast to ordinary brands, which try to evoke different feelings, memories, personality or quality in the eyes and hearts of individuals, brand icons need to present themselves as cultural activists. They are leaders, pioneers of change and new trends, and encourage people to think about themselves and their lifestyle. They are the first to promote new ideas and cultural changes that have the power to encourage individuals to review or even reshape the image they created about themselves.

3.3. The relationship and differences between emotional and cultural branding

As for the relationship and differences between emotional and cultural branding, there is no doubt that the latter is a wider and more elaborate version of the first, and that it is based on the principles of emotional personifications, interaction, inclusion and integration of the senses and creation of experiences. However, there do exist some differences between these two approaches. The emotional approach is formed under the influence of psychology, while in the cultural approach the importance of consumer-brand relationships is elaborated with the help of knowledge of sociology, anthropology, culturology and related social sciences. Accordingly, the focus of emotional branding is an individual relationship between consumer and brand, while the cultural highlights the impact and interaction of brands and entire social groups (Pavlek, 2008).

Cultural branding, therefore, no longer focuses on the consumer as an individual and his favorite brand, but also puts the spotlight on the relationships between people and groups of people brought together by loyalty to the same brand, which encourages interaction between them and the brand they follow. It includes networking and a mass desire for active participation in the use and promotion of the consumers’ favourite brand.

Emotional branding is focused on evoking positive emotions and creating a set of associations related to the brand in consumers’ perception. The ultimate goal of this process is to create an experience for the consumer, for the brand is perceived as a friend, part of their identity, expression of their personalities. If the company successfully develops and implements a emotional branding principles, it is probable that they will achieve success and establish a valuable brand. However, in the perception of consumers, not all successful brands are equally successful. In the consumers’ minds some are above others, they will always be their first choice, integrated into the culture as icons and symbols. Therefore eternal comparisons arise between legendary brand rivals Coca-Cola and Pepsi, Mercedes and Audi, Mc Donald’s and Burger King, Apple and Microsoft. In these examples, it should be noted that, despite the personal preferences of individuals, certain brands stand out among others due to the status they have achieved in society and in the collective consciousness of consumers. They are all successful, but some of them have managed to achieve what others have not – to become an inseparable part of the collective social consciousness, different groups and popular culture.
Both emotional and cultural branding aim at evoking consumers’ emotions. However, cultural branding goes a step further in the process of creating iconic brands and uses myths in developing the brand’s identity. Iconic brands were able to clearly build their identity, which is one of the main pillars of success according to the principles of emotional branding. That is their greatest asset. This identity consists of features that their followers notice as the characteristics of their own identity and the purchase and use of their products are seen as rituals through which they express their personality and build the image that they present to the world.

Brands that have reached the status of cultural icons often are not even perceived as manufacturers or providers of certain services, but are symbols of a certain culture, country or way of life. Their names, logos, slogans and advertising campaigns are known to consumers worldwide, even if they have never bought any of their products. Just looking at their logos awakens a set of associations in the minds of consumers; a set of qualities which they attach to the brand thanks to its successfully executed personification.

4. CONCLUSION

Iconic brands have all the characteristics that make a successful according to the principles of all four approaches to branding. They have proven quality of products, an affectionate clientele who is emotionally attached to them, they manage to influence the masses and make people talk about them. Consumers experience them positively, associate quality and a variety of other advantages to them, develop strong feelings towards them, recommend them to neighbors and gather together as fans and participants in the brands’ myth. They use them to express their identity, beliefs, attitudes and traits. In today’s market that is flooded with thousands of identical, generic products, many of which are of similar quality and features, the consumer wants to experience the brand as an idea, a friend, wants to feel closeness and care for him. In the bottom line, branding is not only boosting sales, but also establishing interaction with consumers, providing opportunities for him to react, express desires, attitudes and feelings, to experience and relive the brand and its myth, and to be able to share it with others.

The importance of experiences for emotional and cultural branding is similar to that of expected benefits in the traditional, classical approach to branding – they are holders and builders of brand equity. Experiences are the ones that inspire consumers with the greatest enthusiasm, joy and desire to worship and follow the brand, and they are created particularly through cultural myths, integrated into the brand identity. Necessary cultural strategies that lead to building a successful iconic brand often include drastic changes in the mentality of brand managers, marketing departments and the leadership of the company, which is sometimes difficult to achieve. For a brand to upgrade its status from popular to icon, it is necessary to move away from the usual branding principles and to open the eyes for market changes, consumer desires, social circumstances and new opportunities. Also, for a brand to become iconic, it cannot be disconnected from the environment and the world around it and concentrate solely on the qualities of products and consumer service. Creating emotional relationships with consumers, especially building involvement, interaction and enthusiasm, requires a constant awareness of the social environment, culture, external influences and the opportunities and challenges arising from them.

The most successful myths are precisely those which brands manage to adapt to the current social context in which they are located. In order for this adjustment to be successful and for their myth and brand to become and stay iconic, a well-planned management of cultural brand is crucial.

LITERATURE


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ABSTRACT
The aim of this paper is to show how European trends in tourism influence Croatian tourism. In order for Croatian tourism to be competitive in the global market, the quality of tourist products and services should be enhanced. This, among other, will depend on improving environment protection and using information and communication technology when providing services in tourism. The process of integration is of an utmost importance, especially in the tourism sector. Since the EU has a formulated policy particularly for this sector, it is necessary to analyze the experience in the competitor countries, such as Malta, Cyprus and Slovenia. The purpose of this research is gaining a vision as regards the direction Croatian tourism should develop in− what type of tourism Croatia needs, what key prerequisites should be fulfilled and how domestic tourism will attract attention. Without a quality vision, success and market recognition cannot be expected.

KEY WORDS: tourism trends, quality of tourist products, best practice, Croatian tourism management.

1. INNOVATING AND IMPROVING TOURIST TRENDS

1.1. Making information exchange and spread easier by using new technologies
The majority of information sources and instruments cover supply and demand, economic role and influences, human resources, legislation and financing, subjects as well as data bases and documentations. The coverage of these issues varies significantly from one member of the European Union to another.

The three priorities which have to be put into practice in a short/medium run are:
• promote and increase the availability of information (small and medium-sized companies)
• support and make partnership building easier per destination/area/sector among different parties interested in information and good practice exchange
• Support and encourage the use of TSA.

In order to make information exchange and spread more available among the EU members it is necessary to identify the obstacles and find the way to overcome them so as to improve communication and information flow and establish communication systems. By doing this, promotion is more efficient and partnerships which improve performance are achieved.

1.2. Improvement in training to enhance skills needed in tourism
The strategy and the measures devised to improve skills in tourism show a trend of holistic solutions based on partnership and dialogue between the institutions and other major participants such as bodies of government. Training and learning are a combination of lectures and practical training.

EU programmes which commonly include training and education are: LEONARDO DA VINCI, SOCRATES and TEMPUS, employment (EQUAL) and networking of educational institutions (ALFA). If the programmes are used to train the staff in tourism, they can encourage and enable the development of new ideas.

Skills in tourism can be improved by providing high quality professional training for employees with the aim to increase the quality of their work and their competitiveness.

1.3. Enhancing quality of tourist products

Same as the World Tourist organisation, the working group has determined quality in tourism as perceived value by a tourist, whereby their expectations are met through their experience of the product. Quality cannot equal luxury and it must be available to all the tourists including the ones with special needs.

By studying and analysing quality policies and methodologies of different EU members’ norms ISO 9000 and 14000, EFQM methodologies, classifying systems of signs (stars) and other specific quality systems have been developed.

The programmes of the Union which are related to quality in tourism identify the following policy areas as especially important for quality development: structural policies, consumer protection, environmental policy, traffic, business policy. Out of them, structural funds had most potential which directly influence the improvement of quality in tourism. Tourist product quality improvement finds that tourist product quality should be available to all the tourists. By defining quality policy, consumer protection and environmental policies clearly, the quality of a tourist product can be improved.

1.4. Promoting environment protection and sustainable development in tourism Vrh ob

Active participation of all the interested parties, in whose interest it is to implement sustainable principles of tourism, is extremely important for tourism. The experts have emphasized several strategies and measures taken at the level responsible for promoting sustainable development in tourism, such as Mediterranean and Baltic, Agenda 21, Destination 21 in Denmark and Calvià (Baleary, Spain) Local Agenda 21.

European working group has developed its conclusions and recommendations around Agenda 21 for tourism in Europe. The aims to be reached are: preventing and minimising the influence of environmental and territorial tourism in destinations, managing traffic growth, encouraging local industry and promoting responsible tourism as a social and cultural development factor. These aims require measures at adequate decision-making levels.

1.5. Managing the influence and using services based on information and communication technologies in tourism

In order to establish what the services based on information and communication technologies (ICT) important for public and private interested parties are, the working group has set the common definition of the services based on ICT. Services based on ICT include the use of digital electronic methods and tools for generating, processing, exchange and distribution of information throughout the whole chain of tourist values.

Three types of gaps have been identified as regards strategy and measures. The first one is about the need to expedite legal and fiscal alignment on the European level in relation to other relevant factors as the means toward a more stable legal framework globally. The second one is that not enough emphasis is put on the development of supply and innovative approach to information at all the levels. The third group is about the need for innovative approach and solutions for small and medium-sized enterprises so as to integrate into the world of ICT technology fully.

2. EU INTEGRATION PROCESS AND TOURISM

The policy of development and organisational structure of tourism is an integral part of every member of the EU. There is no doubt that the membership in the EU influences the sector in several ways\(^2\): free of charge promotion, presence in global media, open airspace, stronger competition to the domestic legal entities (it contributes to improving service quality), new investments in public infrastructure. All this influences the interest of private capital to invest in development of accommodation and hospitality industry. Although the EU legislation does not treat tourism as separately, alignment is needed in order to acquire the EU acquits communitarian. Legislative alignments connected to tourism are\(^3\):

- Free movement of services, people and goods
- Transport policy
- Health and consumer protection
- Social policy and employment
- Small and medium-sized enterprise
- Competition.

\(^2\) Kunst, I., Hrvatski turizam i EU integracije, Institut za turizam, Zagreb, 2012., pg. 48.
Each EU member has to adopt the legislation which is divided into chapters and it gives its members the rights and obligations of: free movement of services, persons and goods, ensuring equal conditions in competition, increasing competitive ability, protection of environment, etc.

2.1. Experience of the countries in the realistic competitive circle

Since Croatia belongs to the circle of Mediterranean countries with highly seasonal character of tourism where “the sun and the sea” are presented as the dominant tourist product, it seems logical to state that the Maltese and Cyprus experience with similar resource characteristics in the time before they accessed the EU are very interesting for Croatia. Slovenia can be included as well because it, same as Croatia, has access to the Adriatic Sea and was for years in the same situation as Croatia in the same country. In the opinion of the European Commission it has been recognised as one of the countries with the fastest growth of tourist turnover.

2.1.1. A practical example – Malta

In the 60s of the last century, when tourism began to develop, i.e. up to becoming an independent country, tourism was not regarded as an important economic activity. After that, the number of overnight stays began to grow quickly (70s and 80s) and was orientated towards mass and a single service (sunbathing), as well as being competitive with prices. This led to a low-quality growth characterised by mass tourism followed by stagnation (90s) and a decrease in the interest for Malta as a tourist destination.

The beginning of the negotiations with the EU led to positive changes. Simultaneously (1999) a special state institution was set up (Malta Tourism Authority - MTA) with the task to reposition the Maltese tourism in the market and make it internationally competitive. By actively involving the entire participants (local people, persons, and legal entities directly involved in providing tourist services, tourist agencies and agents, end users of the services) one aimed to divert from the image of a cheap, mass summer destination. Implementation of the new developing strategy during the preparations for the accession in the EU showed very good results. The number of foreign tourists increased significantly.

2.1.2. A practical example – Cyprus

After the division of Cyprus in two parts, unlike in the isolated northern Turkish part, the tourist turnover in southern part grew under the influence of globalisation. Similar to Malta, the traditional “sunbathing” product started to face a problem of cramped construction. This was followed by irreversible overcrowding of the limited coastal line, the lack of fresh water in the top season and traffic congestion.

2.1.3. A practical example – Slovenia

Unlike Malta and Cyprus, Slovenia has not paid too much attention to developing tourism since it became independent and did not face the problem of mass tourism. After independence, a well-devised strategy and the system of a national tourist promotion played a major role before and during the negotiations and after the accession to the EU. The major characteristics of the long term positioning of Slovenia are: ecological preservation, cleanliness and cultivated environment, sustainable development and diverse tourist experiences in a small space.

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1 Kunst, I., Hrvatski turizam i EU integracije, Institut za turizam, Zagreb, 2012., pg. 59.
2.2. The expected areas of expenses and gains

Based on the experience of the chosen countries in the last round of enlargement, the key areas of activity, the use of the EU pre-accession funds, as well as the expected improvement in the image of these countries in the eyes of the international community, Croatia can also expect gains and losses as the result of the accession in the EU.

As the result of improving general image, it can be expected that:

- increase in tourist turnover
- change in the structure of demand
- increased interest of foreign capital for investing in Croatia
- increased interest of the local population in developing small and medium-sized companies
- change in the structure of accommodation
- increase in operating transparency.

The analysis of experiences in the countries of the last round of enlargement is especially interesting (Malta, Cyprus and Slovenia) for Croatia, mostly because of their geographic position and sea orientation, as well as the significance of tourism in the economy of the country. Quality of the tourist product can be enhanced by considerably refurbishing accommodation facilities (number of hotels, improving service and developing new tourist products. Environment protection can attract the middle, higher-middle and high income level tourists and prolong the season to the whole year.

2.3. Destination partnerships – a prerequisite for the competitiveness of a destination

Economically efficient and socially desirable cooperation between public and private sector in managing a tourist destination should possess the important characteristics of the so called “service outsourcing”.

The cooperation should most importantly be implemented in the area of: destination marketing and promotion, beach management including the maintenance of water quality, planning tourist development, managing national parks, preserving cultural heritage, improving tourist safety in the destination. When the competitiveness and the image of a destination are on the increase, partnerships should be created at the first managerial level in the marketing direction.

3. MANAGING CROATIAN TOURISM

3.1. Managing a tourist destination in the Republic of Croatia

Underdeveloped cooperation between the participants, not being knowledgeable about tourist development, not building networks of local entrepreneurs and not encouraging local inhabitants to become entrepreneurs can be an obstacle to developing destination management. At the same time it can be a limiting factor in achieving market competitiveness.

In order to manage tourist destinations one should systematically review the destination development and direct it towards economic, social, and market-orientated destination development. According to Kunst (2012) who claims that one should connect not only with a low level of understanding of a tourism developing process by the key participants within a destination, but also with a relatively low level of concrete managerial, entrepreneurial and organisation skills and expertise.

It is necessary to educate the local community and all the interested parties about the key advantages of a sustainable system of managing a tourist destination. The principles of managing a destination have been accepted in the developed countries. An excellent example is Scotland where management, marketing and event branding are combined with indigenous values as well as with flora and fauna.

There are other examples of good practice in Europe. In Croatia, the problem is that the interests of particular participants are not represented well enough in some destinations. That is why it is important to understand the importance of a strategic and long term management of a tourist destination to enable the participants and the interested parties could build the competitive advantage.

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5 Kunst, I., Hrvatski turizam i EU integracije, Institut za turizam, Zagreb, 2012., pg. 62.
According to Kunst (2012) a continuous enlightening is needed as well as increasing the awareness of different social
groups and the participants in local development including local political and economic elites, as well as all the walks of
life, which would in a relatively short run result in a needed critical mass of aware individuals who will be capable of:

- Better understanding of the advantages and the disadvantages of tourist development
- Better understanding of their own role in the developing process as well as the responsibility of all the other participants in the development
- Encourage the cooperation, agreements and partnerships at the level of the destination
- Check critically every developmental decision
- Efficiently oppose inadequate developmental solutions

All that is mentioned above stresses the importance of introducing and implementing responsible conduct in the tourist
destinations. However, it is necessary to devise and implement a system of managing a destination in order to increase
its competitiveness.

### 3.2. Analysis of Croatian tourism

The possibilities for developing Croatian tourism in line with global trends have the following advantages: preserved
environment, clean sea, diversity of flora and fauna, development of different and specialised tourism products, availability of EU members, EU programmes, development of traffic infrastructure and safety of tourist destinations. There are negative elements as well which influence Croatian tourism and some of them are: not implementing new technologies, not following tourist trends, seasonality, legal framework, workforce, etc.

Total tourist expenditure in Croatia in 2010 made in 51.6 billion trips was 53 billion Kunas or 7.3 billion Euros. Realised tourist expenditure according to an experimental satellite bill of tourism generates 8.5% of direct gross added value, i.e. 8.3% of direct gross domestic product in Croatia. The ratio of the direct gross domestic product of tourism in the total gross domestic product in 2007 was 8.3%. If stable relations of intermediary expenses and added value of tourism and other industries are assumed, it is estimated that the direct ratio of tourism in the gross added value of Croatia is 7.3%. Simultaneously, it is estimated that the total direct and indirect effect of tourist expenditure in Croatia generates 14.7% of the total added value.

According to the strategy for tourism development in Croatia until 2020, the new vision of the development of Croatian tourism should be based on a set of values and consist of: conceptual, operational and manufacturing aspect. The conceptual aspect of the vision answers the conceptual question so as to what Croatian tourism should be like. The operational aspect answers the second question about the key prerequisites for the development of Croatian tourism and identifies the main aims of the operational strategies. The manufacturing aspect of the vision is the answer to the third question, i.e. what will Croatian tourism attract demand with, stressing the key characteristics of Croatian tourism product.

### 3.4. The new tourism management system in Croatia

As regards the rationalisation of the system, partnerships of particular local tourist boards are encouraged based on area, functionality and manufacturing (e.g. islands, riviera, regions), where belonging to the same Counties does not have to be a necessary condition. It is necessary to ensure the coverage for the whole territory of Croatia. That can be achieved by uniting certain tourist boards in certain regions as well as responsibilities for destination management which is based on the criterion of financial self-sufficiency.

Tourist boards could grow into destination management companies – DMC. It is therefore necessary to create a business model for their functioning. This would include all the interested partners, stakeholders of the model. One should bear in mind that business processes and tasks have to be defined and well-organised. The key to success is the workforce responsible for managing, coordinating and organising the participants of the DMC model. It should be emphasized that skills and additional training of the staff are crucial. An important initiator of the DMC is local population, because they can ensure long-term development of the destination.

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7 Kunst, I., Hrvatski turizam i EU integracije, Institut za turizam, Zagreb, 2012., pg. 115.
10 Strategija razvoja turizma Republike Hrvatske do 2020. godine
3.5. Developmental principles of Croatian tourism

The development strategy for Croatian tourism until 2020 is based on the following principles: partnership, institutional deregulation, ecologically responsible development, more than sunbathing in the whole area, hotel management, authenticity and creativity and quality culture.

Since, “tourism product” is an aggregate category, its development should include a horizontal (between sectors) and vertical (national-regional-local) cooperation, as well as the cooperation between public bodies and private sector (entrepreneurs), civil sector, institutions responsible for protecting environment, traffic culture, health, safety, etc.

Institutional deregulation – it is necessary to simplify (deregulate) the existing legal framework in order to create a motivating and transparent institutional framework which suits entrepreneurs.

Ecologically responsible development involves above all the implementation of technical and technological solutions in construction (e.g. decrease in heating losses, energetically efficient systems of heating/cooling, use of renewable sources of energy), reasonable use of space, respecting the capacity of a destination, micro location of the project as well as the possibility to use the existing infrastructure. Special attention should be paid to promote the solutions leading to low emissions of CO2 with tourist sector fully participating in taking proactive measures of the Strategy for preserving marine environment, which has an aim to protect it in the long run.

It is necessary to develop and commercialise a range of new internationally competitive systems of tourist experiences, such as cultural tourism, bicycle-tourism, adventure and sport tourism, ecotourism, golf tourism as well as health and rural tourism.

Fast development of rural tourism will not be possible without significant investments in attractive resources with significant use of EU funds. The development of those products, which can succeed in a short period of because of their attraction and their resources or tradition in tourism, should be encouraged.

It is important to successfully differentiate Croatia from its competition and this should primarily be based on nurturing nature, social, climatic and/or product (experience) authenticity, i.e. creativity in developing the product, positioning a destination and communication with the market.

Hotel management as the key initiator of an investment cycle – a fast development of hotels involves not only building of hotels suitable for international branding, but also building of thematic and/or boutique hotels owned by local small or medium entrepreneurs as well as developing integrated resort projects.

An innovative market appearance – at the threshold of the EU, it is necessary to establish the image of the country which offers “more than just summer, the sun and the sea”. Rebranding of Croatia should be based on interpreting the core identity of Croatia as the country of “beauty and fulfilment”, i.e. characteristics based on identity and a set of values, such as diversity, content, authenticity, preserved environment, abundance of water, gastronomy and vines, hospitality and beauty.

Manufacturing for tourism – better links of Croatian producers with the tourism sector in order to present high-quality domestic products to the international customers, which will gradually influence the strengthening of their competitive ability. A direction of future development should therefore be cluster building.

Quality culture – a successful, sustainable and a long-term positioning of Croatian tourism in the international market means that the present quality level should be increased. That is why restructuring of the existing education system for the needs of tourism is needed as well as introducing compulsory programmes of life-long learning for different categories of staff employed in tourism. Additional efforts should be made in order to introduce qualitative standards for all the categories of offer, whereby a special emphasis should be put on the mandatory licensing of certain services, introducing certification schemes, quality labels, publishing lists of the best tenders, etc.

Partnership, Deregulation, “Green”, More than sunbathing, Whole area, Authenticity and creativity, Hotel management as an initiator of investments, Innovated market approach, manufacturing for tourism, Quality culture.

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13 Strategija razvoja turizma Republike Hrvatske do 2020. godine.
14 Strategija razvoja turizma Republike Hrvatske do 2020. godine, str. 29.
4. CONCLUSION

The aim of this paper was to explain and synthesise the influence of the European tourism trends and the way they influence Croatian tourism. For Croatian tourism to succeed in the future especially after the accession to the EU it is necessary to, based on the European tourism trends, improve Croatian tourist destinations. It is not enough to offer the 3S, it is important to see the new advantages and opportunities and shape new tourism products.

Examples of good practice in some European countries can be used. By following and adapting European trends a high quality business model DMK can be shaped and used to promote sustainable tourism development. As a full member of the EU, Croatia can work on its recognition and offer high-quality tourism products through the whole year. The main advantages are its natural and social resources which are abundant and can be recognised. This opens an opportunity to develop new specialised tourism products and brands which can make Croatia distinctive in the European tourism market. Moreover, a better competitive position can be achieved, even at the global level.

LITERATURE


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ABSTRACT
The main goal of the current work is to present a generic and global view of wine consumer behavior, by developing different dimensions to a better understanding of such behavior.

For that, it was developed the theoretical background of consumer behavior and specifically decision making process in wine purchase. Also it was developed an empirical research, supported in an online survey that allowed deductions on the questions presented.

From a 311 individuals sample, this study identifies the main wine consuming occasions, all with public (friends, family, parties), with the consumption association of red wine as the wine type more consumed. It is also possible to assess that consumer take into account its own experience and family and friends opinion to take decisions. Also, consumers buy wine essentially on big markets, supermarkets and restaurants. Yet consumers refer flavor, origin region and wine type as the most valued attributes in wine.

This work finds its originality in the fact that it explores the wine consumer behavior in a global and embracing way, also there is a lack of investigation in this specific area. So we hope, that this work may provide a valuable background to marketing strategies, to producers as well to other agents involved, and also to the development of other studies.

KEY WORDS: Consumer Behavior, Attributes, Lifestyles, Involvement, Risk, Wine Marketing.

1. INTRODUCTION
Wine industry is a very profitable market and incredibly important to some economies. In Portugal, a country known by its great wines, this sector represents 11% of VAB, with earnings of 2350 million Euros in 2012, representing a growth of 33 million comparing with the previous year, and 1.6% of exportations total value for national goods (INE, 2012).

Wine marketing has specific characteristics, also is a part of the Mediterranean diet, consumed daily. Wine taste and its specific characteristics depend on several factors, like the region of origin, grape variety, soil and many others, making wine marketing a complex exercise, even more when concerning to consumption and buying behaviors (Kalazić et al., 2010).

Understanding consumer behavior is a challenge to marketers, since is constantly evolving. It is complex and multidimensional, making necessary to unveil the way how it is shaped, evolves and adapts in different situations, allowing to develop appropriate marketing strategies (Hawkins & Mothersbaugh, 2013).

Product involvement is one of the most important factors understand in a better way the behavior towards this product (Bruwer & Buller, 2013). The perception the consumers hold of wine is determined largely by its attributes (Roma et al., 2013), which makes necessary to understand the main questions and attributes valued in wine purchasing (Corduas et al., 2013), having in mind that those are very diverse, intrinsic or extrinsic to the product (Cox, 2009).

The consumer behavior in wine purchasing choices is influenced by purchase perceived risk (Lacey et al., 2009), being also necessary to consider its lifestyles (Orth et al., 2005). As this product becomes a part of individuals habits and culture and more accessible to most people (Ritchie, 2007), it is relevant and necessary to determine consumption habits and patterns (Kalazić et al., 2010) to build more effective campaigns and strategies.

The main goal of this study is to understand and analyze wine consumption behaviors and habits, in its several dimensions, namely product involvement, lifestyles, perceived risk, and attributes.
2. LITERATURE REVIEW

Consumer behavior can be defined as the decision process and physical activities that individuals take to evaluate, acquire, use or consume goods and services (Loudon & Bitta, 1999). The study of these questions is necessary to understand how consumer behaves in a specific situation to a product category (Hawkins & Mothersbaugh, 2013), which permits to adjust strategies, providing competitive advantage in the market (Schiffman & Kanuk, 1997).

The involvement measuring and its relation and impact in consumer behavior is not consensual (Quester & Smart, 1996), however investigators agree that involvement’s level is related with the importance given by consumer to certain object or situation, which is known by personal relevance perception (Fonseca & Rossi, 1998). This concept evolution leads to a new definition “involvement is a motivational and goal-directed emotional state that determines the personal relevance of a purchase decision to a buyer” (Brennan & Mavondo, 2000, in Bruwer & Buller, 2013), determining that a high level of involvement in all cases is related to personal relevance (Zaichkowsky, 1985).

Attributes referred by Laurent & Kapferer (1985), as being the basis to involvement as construct can be found in wine (Bruwer & Buller, 2013), allowing to obtain acceptable consumers’ samples, either in high or low involvement (Quester & Smart, 1996). Wine is a product that can involve consumer or leave him indifferent (Brown et al., 2006). As bigger is the knowledge towards wine, stronger is the emotional link, and bigger is the propensity to the consumption and choice of expensive wines (Bruwer & Buller, 2013), even though knowledge can be objective or subjective, originating different levels of involvement in purchase and consumption (Cox, 2009).

Lifestyle actual or pretended influences all aspects of consumption behaviors, even if in a subtle and indirect way (Hawkins & Mothersbaugh, 2013). Consumer lifestyle and its preferences in terms of origin, as well the knowledge of the benefits expected from wine, help marketers to build communication and media strategies (Orth et al., 2005).

Wine is a unique product with complex attributes namely brand, region, country, grape variety, price or label (Kalazić et al., 2010). Wine internal characteristics include physic and chemical attributes and external attributes include a wide range of questions such as brand, price, label, region of origin, wine age, bottle design or color, purchase place and consumer involvement (Navajas et al., 2013). Attributes like flavor, wine type, alcohol, age, price, brand, color, label, origin region or purpose of use, are the most frequently investigated; price, origin region and brand are recognized as the most influent attributes in consumer decision (Corduas et al., 2013).

Understanding how consumers are influenced in their wine choices by perceived risk and their strategies to reduce it, gives an advantage to wine industry, since most wine consumers are very sensitive to risk during the purchase process, although consumers with a high wine knowledge show more interest in experimentation and risk (Lacey et al., 2009). We can stand out some generic risk reduction strategies in wine purchase; information search, choice of the most important brand, choices based on store’s image, choice of well-known brands, price and tastes (Bruwer & Rawbone-Viljoen, 2013).

3. METHODOLOGY

This study was developed based on a survey. Only individuals that had wine consumption experience, even if sporadically, or had consumed wine at some point, were questioned.

3.1 Survey development

Wine consumer involvement questions were based on Park, Mothersbaugh and Feick (1994) and Gursoy and Gavcar´s (2003) scales. In attributes and other questions influencing wine choices, we took into consideration Cohen, Hauteville & Lucie Sirieix (2009) and Hall, Lockshin & Mahony’s investigation (2001). Lifestyles analysis was based on Hall, Lockshin & Mahony`s investigation (2001). Risk reduction strategies, consumption habits and sociodemographic analysis had as background Lacey, Bruwer & Li´s (2009) and Kotler & Amstrong studies (1995) works. Wine consumption frequency and occasions were developed from Bruwer, Li & Reid (2002).

A pretest was made in order to refine and adjust the survey so that were no interpretations issues or doubts. Survey variables were translated into Portuguese and adjusted to this study purpose, applying likert measuring scale (1-5).

3.2. Data collection

An online questionnaire was proposed to Portuguese wine consumers, at least sporadic (no need to be experts or regular consumers) between March and December of 2012. 311 questionnaires were validated from 457 questionnaires received.
3.3. Sample Profile

Most of our sample is composed by women with ages between 26 and 35 years old. In what regards to school education, mostly our sample have university studies. All respondents live in Portugal, mostly in the Centre. Regarding occupation, sample is composed of Middle and senior management. The average income of respondents is between 501 and 1000 euros, about 25% earns between 1001 and 1500 euros.

4. EMPIRICAL COMPONENT

Based on an univariate analysis we can draw some conclusions:

- In product involvement there are evidences that consumer gives a significant relevance to wine in specific situations. Results also showed that to wine consumption is related by consumers with pleasure sensations.
- Regarding the questions taken in to consideration by consumers referring to last wine purchase, consumption experience, suggestion of others and wishing to try something new are the most influents in consumers choices. The fact that wine harmonizes with food in a restaurant meal was pointed as having some influence as well.
- In internal and external attributes the results showed that the most important were flavor, region of origin and wine type (white, red, rose,...), of significant relevance were also price, discounts, grape variety and wine brand.
- Taste wine quality, socialize or food complement are factors that individuals agree as being related to wine. In a most moderated way health benefits, fun and pleasure in life were also considered.
- About consumer strategies in order to make the best wine choices, the most used are ask for family and friends advice and buy a brand to which the consumer is loyal. Other questions taken into consideration by consumers were: information from media, packaging information, salesperson, buy a known brand or use information about price.
- Regarding consumption habits concerns, especially, the type of wine more consumed, is red wine, followed by white and with less frequency “green” wines, sparkling and rosé.
- Concerning to quantities consumed respondents said 0-4 liters a few times in a week, about money spent monthly in wine, 20 Euros or less was the most repeated answer.
- The preferred places to buy wine are big markets, supermarkets. The most commonly package bought is the one of 0,75 cl.
- In what regards to the wine consumption occasions the most pointed were at home and in restaurants, both with family and with friends, and at parties. Wine consumption in business or in situations where individuals are alone have a low significance or none. In all situations red wine is the most preferred.

5. DISCUSSION AND CONCLUSION

This study had as main goal to provide a generic understanding of Portuguese wine consumers’ behaviors of wine choices, purchases and consumption.

We concluded that wine consumers are highly involved with this product giving relevance to do the right choice. Regarding product attributes, the flavor, region of origin and wine type are the most relevant in wine choices, supporting previous research. In a more moderate way, grape variety, discounts, brand and price are also pointed as important to the decision. The questions that influence wine decisions are peers advices and consumer’s own experience.

Advices of family and friends and buying a brand which consumer is loyal to, are the most risk reduction strategies used by consumers, supporting that in wine choices consumers tend to stay in a certain comfort area.

In consumption and purchase habits, consumer does not spend too much in wine, yet he consumes regularly, choosing more often red wine and purchasing in big markets and supermarkets.

This product does not seem to be related to Portuguese wine consumer lifestyles, at least to his self-concept. Wine is consumed to socialize, to taste quality and as a food complement, furthermore it is related to fun and pleasure in life and as having health benefits. About the consumption occasions, the most common are those in public, at home, in restaurants or in parties, always with friends and family.

Wine marketing is complex due to diversified nature of this product, therefore it is necessary to find the best way to communicate with consumers. Respecting to management questions we can point some deductions and conclusions:
• Once purchases are essentially made in big markets and supermarkets, some brands and producers should think about having their products available on those spaces.

• Concerning to information, consumers want to make the right choices, making crucial:
  • To provide the biggest amount of information about the products and brands,
  • To promote tasting actions and free samples available and accessible to common consumer.

• Given the importance of the region of origin in wine choices, organizations should put their efforts together in order to increase the notoriety of their region.

• Promotion campaigns should be designed taking into account that wine consumption is related to social occasions.

Regarding the implications for science, this study, although exploratory, it was our aim to give an extended vision and comprehensive understanding of consumer behavior relating to the wine product, thus allowing to assess various issues related to the consumption of wine such as lifestyles, involvement, attributes, consumption behaviors and risk reduction strategies.

Acknowledgments:

LITERATURE

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EFFECTS OF DEPENDENCE ON EXPORTS OF NATURAL RESOURCES: COMMON FEATURES AND REGIONAL DIFFERENCES BETWEEN HIGHLY DEPENDENT STATES

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ABSTRACT

Studies in geopolitics of natural resources deal especially with geopolitical impacts of exploitation and export of oil and gas, as well as the geopolitical impacts of exploitation and export of precious and rare, strategically important minerals and ores. This paper presents researches on the dependence of some countries on the export of natural resources which investigate if this dependence effects the risk of exposure to conflict. It also presents the knowledge about the effect of dependence on revenues from the export of non-renewable energy, ie fuel (primarily oil and natural gas) on the development of democracy in individual countries and concludes: the greater the degree of this dependence, the development of democracy is slower. According to the World Bank, the share of fuel in total exports of goods from certain countries is taken as a key indicator, and the countries that were investigated, according to the latest available data, had the share greater than 50%. It also includes data on the index of quality of life, the Corruption Perceptions Index by Transparency International data and information about individual freedom in society according to Freedom House. Comparative analysis was then made that included 30 countries highly dependent on the exploitation and export of non-renewable energy sources, from seven different regions across four continents. Significant similarities, but also noticeable differences were found within each region, and also significant differences between individual regions, given the data on the quality of life index, the index of perception of corruption and the degree of freedom in society, which indicates regional conditionality of quality of management of earnings achieved by exploiting non-renewable energy sources.

KEYWORDS: addiction, natural resources, oil, democratization, the perception of corruption.

1. INTRODUCTION

Researches of geopolitics and geo-economics of natural resources are specifically dealing with the geopolitical impacts of exploitation and export of oil and natural gas, as well as the geopolitical impacts of exploitation and export of precious and rare, strategically important minerals and ores. This kind of research studies the link between dependence of some countries on the export of natural resources and the increased risk of exposure to conflicts, which predominantly have intergovernmental character, and their background is a struggle for control over the exploitation of natural resources and revenues from the exploitation, which mainly come from exports. Exploitation of natural resources and dependence on their exports in the modern age, as well as in the entire history from the beginnings of colonialism and enslavement of non-European peoples, conducted primarily with a goal to exploit the natural resources, causing an increased risk of violence and conflict, which can grow into wars.

Potential for greater political instability, population growth of underdeveloped countries and the growing need for natural resources caused by the increasing destruction of the natural environment, lead the world in the period that could be characterize by the conflicts for the natural resources. Given their territorality, natural resources give territorial significance to many other sectors, since they move in accordance with the definition of political boundaries and local understanding of alliances with outside powers.

Research of dependence on exports of natural resources focus on several aspects of the relationship between dependence on exports of natural resources, especially oil and:

1) risk of exposure to conflict;
2) trends of economic growth;
3) slowing down the process of democratization of society in each country/region;
4) level of corruption in society;
5) degree of unequal distribution of wealth.
This paper focuses on aspects of the relationship between dependence of the economies on natural resources with the risk of exposure to conflicts, slowing down the process of democratization and the level of corruption in society and gives a comparative view of the countries that are most dependent on the exploitation of non-renewable energy sources, as the most important natural resources, while considering regional differences and similarities of the countries (depending on whether they belong to the same or different region) in terms of quality of life index, the degree of perception of corruption in the society and the degree of freedom in a particular society. These three indicators are considered indicators that show how the earnings of natural resources are used, whether for the benefit of society or to fund only a few, which is held in power mainly through control of the repressive apparatus.

2. DEPENDENCE ON NATURAL RESOURCE EXPLOITATION: MAIN FEATURES AND REGIONAL DIFFERENCES

The results of previous researches, mainly associate the risk of exposure of individual countries or even entire regions (Middle East and North Africa) to the conflicts with interstate or intrastate character to a wealth of natural resources in a specific country/region and the degree of dependence of the country/region on the export of natural resources, as measured by various parameters such as the share of exports of natural resources in GDP, total exports and revenues from exports. Among the researches of connection between exposure of countries to conflicts and wealth and the degree of dependence of the country on the export of natural resources, researches by Collier (2004, 2007), Collier and Hoeffler (1998, 2005) that are quantitatively based, stand out as the researches which show a clear correlation between dependence on exports of natural resources and risks of the outbreak and continuation of the conflict. In studying a connection between the dependence on exports of oil (and gas) with a slowdown in democratization and the high level of corruption and inequality of wealth in society, research by Schubert (2006) should be mentioned as relevant. Ross (2001) outlines three effects of connection of stocks and dependence on exports of oil to the authoritarian regime which thus slows down the process of democratization: rentier, repression and modernization effect of oil.

In the investigation of association between dependence on exports of natural resources and the risk of the outbreak of the conflict, as well as the impact to the duration of the conflict related to natural resources, Collier (2004) conducted an analysis of 54 civil wars of high intensity, which emerged and took place in a certain time period between 1965 and 1999. This analysis demonstrated that a higher level of the export of raw materials in GDP “significantly and substantially” increased the risk of conflict. Correlation between dependence on exports of oil and the possibility of the outbreak of the conflict is particularly pronounced. Countries in which 10 to 25 percent of GDP is generated by exports of natural resources, along with other characteristics constant at the average level for developing countries, with low-income population, the risk of civil war in the next five years, grows from 11 to 29 percent (Collier, 2004: 1-2). Correlation of dependence on exports of natural resources with the extension of the existing conflict, derives from the fact that the rebel forces taking part in the civil war can be funded from the illegal exploitation and trafficking of, for example, valuable ores and minerals. Rather, they are “forced” to it if they want to continue the fight, behind whose proclaimed political goals often lies just a desire to separate from state control so the leaders of various rebel movements and their troops could be funded (Collier, 2007: 201).

There is a level of similarity in the causes of coups and civil wars. Standard indicators of dissatisfaction such as political repression and economic inequality does not show as significant factors that would affect their outbreak. However, there are common economic indicators that indicate exposure to the risk of civil wars and military coups, which are low income population and slow economic growth. Civil wars and coups tend to repeat themselves. Once they occur, the possibility of their repetition increases (Collier, Hoeffler, 2005: 2). Economic stagnation and even more recession also affect the possibility of civil war, because it is proven that each percentage point lower at the growth rate of income per capita increases the risk of conflict by around one percentage point. Likewise, the reverse is cause-and-effect relationship also applies, because the risk of civil war may affect the reduction of investments and slow down economic growth (Collier, 2007: 204). Possibility of a civil war is also related to the level of income in a country. The share of income that the country manages to collect in the form of tax increases with income level, so in most countries that are members of the OECD, countries accounts for approximately 40 percent of national income as taxes, while in very poor countries that share is below 10 percent, which reduces the capacity of the country to fund the armed forces and internal security forces. The revolt against the government and the outbreak of the Civil War are associated with three key factors: a high proportion of raw materials in the exports of the country, low-income population and low rate of economic growth (Collier, 2007: 208-209).

Collier and Hoeffler (1998) have shown a correlation between the outbreak of a conflict and dependence on natural resources, as the unit of measure given the share of exports of natural resources in GDP. Natural resources have an impact on some types of conflict, but not all, they are significantly associated with the onset of conflict (Collier, 2004) and the results are quite robust to the use of alternative measurement of wealth of natural resources, such as measurement of rents generated from natural resources (Collier, Hoeffler, 2005). Possible causes of inter-state wars, as opposed to the
possible causes of civil wars, are associated with the relationship between individual countries of the same region, which are manufacturers and exporters of natural resources (e.g. These relations and the potential for conflict can certainly be determined by the wealth in oil, i.e. sites that may reside on the disputed territories beyond the boundaries of which one or both parties do not recognize, and the example is a conflict between Iraq and Kuwait in 1990), as well as the relationship of oil-exporting countries from the same region, to the superpower, the United States (examples of Iraq and Iran, and Iraq and Kuwait, as well as various relationships between Iran and Iraq and the United States since the late 1970s). The role of oil and diamonds, minerals and timber in the past two decades in the analysis of conflicts that occur in regions that are rich in these natural resources are increasingly recognized as crucial. Traditionally present and recognized, the “curse” of oil is increasingly replaced by the “curse” of natural resources, as a broader concept, which includes natural resources in poor countries, which are located in unstable geopolitical regions of the world.

Research that shows different results from those of the Collier and Hoeffler, was made by Brunnschweiler and Bulte (2009) and it proved the link between natural resource wealth of individual countries and prolongation of the conflict. However, the connection of wealth in natural resources and the degree of risk of conflict has not been proven, but the wealth of natural resources is shown as a factor that reduces the possibility of conflicts. It is necessary to investigate whether there is a connection between the wealth of natural resources and dependence on their exports to the lack of democracy, whose development stops through authoritarian regimes in countries that are rich in natural resources and largely dependent on their exports. Oil and gas now make up at least 30 percent of total export revenues in 34 countries with underdeveloped economies, none of which can be seen as democratic and free society (Schubert, 2006: 1). In authoritarian regimes, the elite has income from exports of natural resources and they are vitally concerned to maintain these revenues and increased as they imply the possibility of financing the repressive state apparatus that keeps the regime alive, and also offers the possibility of exceptional personal enrichment of few individuals. Violence, repression and conflict are causally related to the lack of democracy - the greater the lack of democracy, the greater the chance of violence and conflict. The reverse principle applies too.

There are three known mechanisms that link the presence of oil and authoritarianism of the regime - rentier effect, the repressive effect of modernization and the impact of oil. All three effects hinder the development of democracy:

1. **Rentier effect** - large oil revenues allow for lower taxes and a greater “care” of the government for the people, which reduces the desire for democratization;

2. **Repressive effect** - direct control of the state apparatus over a sufficient income, enabling the financing of large armed forces and internal security apparatus that serve for repression;

3. **Modernization effect** - a shift towards employment in industry and services affects less expression of aspirations for democracy (Ross 2001: 357).

Countries rich in oil and dependent on exports of oil usually have a few of the elite that enjoys millions gained from oil exports, while most of the population lives in misery. J. Stiglitz named such countries “rich countries of poor people” (Schubert, 2006:2).

### 2.1 Methodology

A key indicator of survey is the share of mineral fuels in total exports of goods, according to the SITC classification (Standard International Trade Classification, Rev. 3), group 3, Mineral fuels, lubricants and related materials: 32 - Coal, coke and briquettes, 33 - Petroleum, petroleum products and related materials, 34 - Gas, natural and manufactured, 35 - Electric current. It is primarily about non-renewable energy sources. Countries where this share, according to the latest available data, was higher than 50% have been investigated. At the same time, the data on the quality of life index, the index of perception of corruption according to Transparency International, and information on freedom in a particular company according to Freedom House were included to connect the share of dependence on exports of fuel with specific values of other relevant indicators and to try to find regional specialties countries.

With respect to each indicator, countries are classified into several categories, with the official classification used by the UNDP for quality of life index, that divides it into very high (1st to 47th place in the world), high (48th to 94th place), moderate (95th to 141st place) and low (142nd to 187th place). For the Corruption Perceptions Index values are taken from the data of Transparency International and classification was created: high level (value of the index ending with 34), intermediate level (index value from 35 to 49) and a low level of corruption perception (from 50 to a maximum of 100, while in reality, among the studied countries, by far the best is Norway with a score of 85). For the classification of countries according to the degree of political freedom, official classification of Freedom House was taken, which divides countries into free, partly free and unfree societies, depending on the results in terms of political and civil liberties, with 1 being the best score, and 7 worst result. This methodology was applied in Tab. 3, where states are grouped with respect to regional affiliation and similarities and differences were found given the geographical location of the studied countries.
2.2 Results and discussion

Table 1. States that generate more than 50 percent of mineral fuels, lubricants and related materials (according to the classification SITC) in total exports of goods: quality of life index, the perception of corruption and the degree of political freedom (2012)

<table>
<thead>
<tr>
<th>Country</th>
<th>Percentage of mineral fuels, lubricants and related materials in total merchandise exports</th>
<th>Human development index and position in the World</th>
<th>Corruption perception index and position in the World</th>
<th>Political freedoms, according to Freedom House (Combined Average Ratings): Political Rights; Civil Liberties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Algeria</td>
<td>97</td>
<td>0.713 (93.)</td>
<td>34 (105.)</td>
<td>6; 5 (not free)</td>
</tr>
<tr>
<td>Azerbaijan</td>
<td>93</td>
<td>0.734 (82.)</td>
<td>27 (139.)</td>
<td>6; 5 (not free)</td>
</tr>
<tr>
<td>Bahrain</td>
<td>72 (2011)</td>
<td>0.796 (48.)</td>
<td>51 (53.)</td>
<td>6; 6 (not free)</td>
</tr>
<tr>
<td>Bolivia</td>
<td>55</td>
<td>0.675 (108.)</td>
<td>34 (105.)</td>
<td>3; 3 (partly free)</td>
</tr>
<tr>
<td>Cameroon</td>
<td>56</td>
<td>0.495 (150.)</td>
<td>26 (144.)</td>
<td>6; 6 (not free)</td>
</tr>
<tr>
<td>Colombia</td>
<td>70</td>
<td>0.719 (91.)</td>
<td>36 (94.)</td>
<td>3; 4 (partly free)</td>
</tr>
<tr>
<td>Congo, Republic</td>
<td>68 (2010)</td>
<td>0.534 (142.)</td>
<td>26 (144.)</td>
<td>6; 5 (not free)</td>
</tr>
<tr>
<td>Ecuador</td>
<td>58</td>
<td>0.724 (89.)</td>
<td>32 (118.)</td>
<td>3; 3 (partly free)</td>
</tr>
<tr>
<td>Gabon</td>
<td>83 (2009)</td>
<td>0.683 (106.)</td>
<td>35 (102.)</td>
<td>6; 5 (not free)</td>
</tr>
<tr>
<td>Iran</td>
<td>70 (2011)</td>
<td>0.742 (76.)</td>
<td>28 (133.)</td>
<td>6; 6 (not free)</td>
</tr>
<tr>
<td>Iraq</td>
<td>99 (2009)</td>
<td>0.590 (131.)</td>
<td>16 (171.)</td>
<td>6; 6 (not free)</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>71</td>
<td>0.754 (69.)</td>
<td>28 (133.)</td>
<td>6; 5 (not free)</td>
</tr>
<tr>
<td>Kuwait</td>
<td>93 (2009)</td>
<td>0.790 (54.)</td>
<td>44 (66.)</td>
<td>5; 5 (partly free)</td>
</tr>
<tr>
<td>Libya</td>
<td>98 (2010)</td>
<td>0.769 (64.)</td>
<td>21 (160.)</td>
<td>4; 5 (partly free)</td>
</tr>
<tr>
<td>Nigeria</td>
<td>84</td>
<td>0.471 (153.)</td>
<td>27 (139.)</td>
<td>4; 4 (partly free)</td>
</tr>
<tr>
<td>Norway</td>
<td>70</td>
<td>0.955 (1.)</td>
<td>85 (7.)</td>
<td>1; 1 (free)</td>
</tr>
<tr>
<td>Oman</td>
<td>84</td>
<td>0.731 (84.)</td>
<td>47 (61.)</td>
<td>6; 5 (not free)</td>
</tr>
<tr>
<td>Qatar</td>
<td>75 (2011)</td>
<td>0.834 (36.)</td>
<td>68 (27.)</td>
<td>6; 5 (not free)</td>
</tr>
<tr>
<td>Russian Federation</td>
<td>71</td>
<td>0.788 (55.)</td>
<td>28 (133.)</td>
<td>6; 5 (not free)</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>88</td>
<td>0.782 (57.)</td>
<td>44 (66.)</td>
<td>7; 7 (not free)</td>
</tr>
<tr>
<td>Syria</td>
<td>50 (2010)</td>
<td>0.648 (116.)</td>
<td>26 (144.)</td>
<td>7; 7 (not free)</td>
</tr>
<tr>
<td>Trinidad and Tobago</td>
<td>66 (2010)</td>
<td>0.760 (67.)</td>
<td>39 (80.)</td>
<td>2; 2 (free)</td>
</tr>
<tr>
<td>Venezuela</td>
<td>97 (2011)</td>
<td>0.748 (71.)</td>
<td>19 (165.)</td>
<td>5; 5 (partly free)</td>
</tr>
<tr>
<td>Yemen</td>
<td>89</td>
<td>0.458 (160.)</td>
<td>23 (156.)</td>
<td>6; 6 (not free)</td>
</tr>
</tbody>
</table>

Note: While searching for information on the share of mineral fuels, lubricants and related materials in total exports of goods, all the data from the same year were not found so the closest year for which data are available is indicated in parentheses.

Sources:
- The degree of political freedom: [http://www.freedomhouse.org/sites/default/files/FIW%202013%20Booklet.pdf](http://www.freedomhouse.org/sites/default/files/FIW%202013%20Booklet.pdf)

Since data were not available for all countries exporting non-renewable energy sources, primarily oil and gas, information on the share of natural resources in total GDP in 2012 was taken as the relevant data that shows the dependence of the countries, which was available, and data is shown in Tab. 2. States that have been considered export primarily oil and/or gas, and the percentages given in them exceeded the 20%.

Table 2. The share of total natural resources rents in total GDP, an index of quality of life, perception of corruption and the degree of political freedom (2012)
Of the 24 countries listed in Tab. 1, most of them, according to the Corruption Perceptions Index in the public sector and the degree of political freedom, are highly corrupt countries and not free or partly free societies. It is even higher degree of correlation between the index of perception of corruption of the public sector, low level of political freedoms and oil and/or gas as the main export goods, which suggests that the claim about the “curse” of oil (and natural gas), at least when it comes to influencing political freedom and corruption, is invalid. Countries in Tab. 1, following an examination in the structure of exports, it can be for inclusion and six states from Tab. 2, in which the exploitation of oil and / or gas also makes a significant or major factor that generates GDP and whose position in the ranking index of perception of corruption of the public sector and the degree of political freedom, further confirms the negative impact of addiction economies on exports of oil and / or gas. After examining the structure of exports of countries in Tab. 1, we can add to them six states from Tab. 2, in which the exploitation of oil and/or gas also makes a significant or major factor of generating GDP and whose position in the index of perception of corruption of the public sector and the degree of political freedom ranking, further confirms the negative impact of addiction of economies on exporting oil and/or gas. The impact of oil on the stability of a country (heavy dependence on oil exports generate more political instability) does not necessarily correlate. The state can simultaneously be stable, and it does not have to be a democratic society nor have large demands for democratization, and this may indicate a rentier effect of oil, which reduces the desire for democratization. A good example are the monarchies of the Arabian peninsula.

Countries such as Algeria, Iran, Saudi Arabia, Angola, Nigeria, suffered a decline in income per capita in recent decades. One of the main causes of the totalitarian regimes in these countries and the high level of corruption that leaves much of the revenue from oil exports in the hands of an elite that runs the country and who is not motivated to try to develop other sectors of the economy. They are also able to, at least to some extent, “buy” social peace and maintain the repressive apparatus that is the guarantor of survival of the regime. Dependence on exports of oil affects the growth of inequality in society and increases the number of poor people. Examples confirming this assertion are Nigeria and Angola, where in recent decades the number of poor people has increased significantly. Advocates of the thesis of the “curse” of oil argue that there is virtually no case in which the possible success of a country is based only on the export of oil. At best, they say, it can only be a success for the elite that has income from oil, as well as foreign companies that are reaping most of the profits from oil, in alliance with local elites (Birdsall, Subramanian, 2004: 86). As many as 12 of the 25 countries most dependent on exports of various ores and six of the 25 countries most dependent on exports of oil belong to a group that the World Bank calls “highly indebted poor countries.” High levels of inequality between the rich minority and the poor majority of the population are present in them, in comparison to countries with similar income level of the population. Countries dependent on exports of minerals even have a higher degree of inequality in the society than the countries dependent on exports of oil, which are said to not have a higher degree of inequality in the society than the countries that are not dependent on exports of raw materials, which would mean that the dependence on the export of oil is much less directly associated with poverty (Ross, 2003: 5-7). The largest share of countries that depend on exports of crude oil suffer from economic and political instability (or almost complete absence of political freedom), conflict (which may turn into civil wars), a highly militarized society, a high degree of public sector corruption and extreme stratification of society, when it comes to the range of inequalities in income between the rich elite and the “ordinary” people who live in difficult conditions i.e. poverty.

According to Tab. 1 and Tab. 2, Tab. 3 is made: regional classification of countries dependent on exports of natural resources (raw materials), given the data on the quality of life index, the index of perception of corruption and the degree of political freedom. Data on regional affiliation and human development index of the studied countries dependent on exports of raw materials show that the countries extremely dependent on exports of energy sources, from which the oil is arguably the most important, can achieve high and very high human development index and is therefore concluded that this parameter is more affected by regional affiliation of countries and lower population density.
Table 3. Classification of countries with high dependence on exports of raw materials to the quality of life index, the index of perception of corruption and the degree of political freedom, given the geographical location of the country.

<table>
<thead>
<tr>
<th>Human development index: low</th>
<th>Sub-Saharan Africa</th>
<th>Middle East and North Africa</th>
<th>Southeast Asia</th>
<th>Post-Soviet Space</th>
<th>South America</th>
<th>Central America &amp; The Caribbean</th>
<th>Europe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Angola, Cameroon, Chad, Congo, Republic of the; Nigeria</td>
<td>Yemen</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Human development index: medium</th>
<th>Sub-Saharan Africa</th>
<th>Middle East and North Africa</th>
<th>Southeast Asia</th>
<th>Post-Soviet Space</th>
<th>South America</th>
<th>Central America &amp; The Caribbean</th>
<th>Europe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equatorial Guinea, Gabon</td>
<td>Iraq, Syria</td>
<td>Turkmenistan</td>
<td>Bolivia</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Human development index: high</th>
<th>Sub-Saharan Africa</th>
<th>Middle East and North Africa</th>
<th>Southeast Asia</th>
<th>Post-Soviet Space</th>
<th>South America</th>
<th>Central America &amp; The Caribbean</th>
<th>Europe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Algeria, Bahrain, Iran, Kuwait, Libya, Oman, Saudi Arabia</td>
<td>Azerbaijan, Kazakhstan, Russian Federation</td>
<td>Colombia, Ecuador, Venezuela</td>
<td>Trinidad and Tobago</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Human development index: very high</th>
<th>Sub-Saharan Africa</th>
<th>Middle East and North Africa</th>
<th>Southeast Asia</th>
<th>Post-Soviet Space</th>
<th>South America</th>
<th>Central America &amp; The Caribbean</th>
<th>Europe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qatar, United Arab Emirates</td>
<td>Brunei</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Corruption perception index: high</th>
<th>Sub-Saharan Africa</th>
<th>Middle East and North Africa</th>
<th>Southeast Asia</th>
<th>Post-Soviet Space</th>
<th>South America</th>
<th>Central America &amp; The Caribbean</th>
<th>Europe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Angola, Nigeria, Cameroon, Chad, Congo, Republic of the; Equatorial Guinea</td>
<td>Algeria, Iran, Iraq, Libya, Syria, Yemen</td>
<td>Azerbaijan, Kazakhstan, Russian Federation, Turkmenistan</td>
<td>Bolivia, Ecuador, Venezuela</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Corruption perception index: medium</th>
<th>Sub-Saharan Africa</th>
<th>Middle East and North Africa</th>
<th>Southeast Asia</th>
<th>Post-Soviet Space</th>
<th>South America</th>
<th>Central America &amp; The Caribbean</th>
<th>Europe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gabon</td>
<td>Kuwait, Saudi Arabia</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Corruption perception index: low</th>
<th>Sub-Saharan Africa</th>
<th>Middle East and North Africa</th>
<th>Southeast Asia</th>
<th>Post-Soviet Space</th>
<th>South America</th>
<th>Central America &amp; The Caribbean</th>
<th>Europe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bahrain, Qatar, Oman, United Arab Emirates</td>
<td>Brunei</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Freedom in the society: not free</th>
<th>Sub-Saharan Africa</th>
<th>Middle East and North Africa</th>
<th>Southeast Asia</th>
<th>Post-Soviet Space</th>
<th>South America</th>
<th>Central America &amp; The Caribbean</th>
<th>Europe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Angola, Cameroon, Chad, Congo, the Republic; Equatorial Guinea, Gabon</td>
<td>Algeria, Bahrain, Iran, Iraq, Oman, Qatar, Saudi Arabia, Syria, United Arab Emirates, Yemen</td>
<td>Brunei</td>
<td>Azerbaijan, Turkmenistan, Kazakhstan, Russian Federation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Freedom in the society: partly free</th>
<th>Sub-Saharan Africa</th>
<th>Middle East and North Africa</th>
<th>Southeast Asia</th>
<th>Post-Soviet Space</th>
<th>South America</th>
<th>Central America &amp; The Caribbean</th>
<th>Europe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nigeria</td>
<td>Kuwait, Libya</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Freedom in the society: free</th>
<th>Sub-Saharan Africa</th>
<th>Middle East and North Africa</th>
<th>Southeast Asia</th>
<th>Post-Soviet Space</th>
<th>South America</th>
<th>Central America &amp; The Caribbean</th>
<th>Europe</th>
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<td></td>
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</tbody>
</table>

However, when it comes to the level of perception of corruption of the public sector, it shows that countries with a high degree of dependence on the export of oil and/or gas (which make absolutely the largest share of their exports), still represent the countries with a very high degree of corruption of the public sector, according to the corruption Perceptions Index, which confirms that the high dependence of GDP on exports of non-renewable energy sources means a higher level of public sector corruption and low or at best moderate degree of political freedom.

**Table 4.** The number of investigated countries dependent on exports of natural resources in a particular region of the world, according to differences in the human development index, the index of perception of corruption and the degree of political freedom

<table>
<thead>
<tr>
<th>Human development index</th>
<th>Sub-Saharan Africa (7)</th>
<th>Middle East &amp; North Africa (12)</th>
<th>Southeast Asia (1)</th>
<th>Post-Soviet Space (4)</th>
<th>South America (4)</th>
<th>Central America &amp; The Caribbean (1)</th>
<th>Europe (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>5</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Medium</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>High</td>
<td>0</td>
<td>7</td>
<td>0</td>
<td>3</td>
<td>3</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Very high</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Corruption perception index</th>
<th>High</th>
<th>Medium</th>
<th>Low</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Medium</td>
<td>1</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Low</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Freedom in the society</th>
<th>Not free</th>
<th>Partly free</th>
<th>Free</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Partly free</td>
<td>10</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Free</td>
<td>4</td>
<td>4</td>
<td>1</td>
</tr>
</tbody>
</table>

It is the regional differences in the aforementioned indicators which we attempted to be study in the research conducted here, in order to respond to the thesis: among countries dependent on exports of natural resources, which have been found to possess a number of common features, still have distinctive regional features that allow these countries to be ranked in subgroups based on regional affiliation. Results from Tab. 4, show that in sub-Saharan Africa, the largest number of countries studied have a high degree of corruption perceptions of the public sector and the low degree of political freedom. At the time of the beginning of greater exploitation of oil, underdevelopment of institutions was present as well as the lack of democratic traditions. Revenues generated from oil have slowed democratization, enhanced corruption and increased inequality in society, while in most countries they did not significantly or at all improve the quality of life of residents. State of the Post-Soviet area, listed above, are also marked by a high degree of perception of corruption, low level of political freedom in society, like most of the countries of North Africa. It is significant that all of the studied countries in these two areas have a common feature of dependence on exports of oil and/or gas. As in most countries in sub-Saharan Africa, in the post-Soviet space and northern Africa is also visible the link between higher levels of corruption and lower levels of political freedom. The question remains whether the lack of freedom generates corruption or corruption prevents a higher degree of political freedom? In contrast, in the Arabian peninsula monarchies (and Brunei) low degree of political freedom is not followed by the high level of corruption, while the index of quality of life is the highest among all countries in the region. These countries are very rich and the wealth is so large that it allows a high quality of life, and it, along with the repressive apparatus, reduces the desire for democratization. Investigated countries from South America, show that in this region the lower level of perception of corruption and a higher degree of political freedom are connected, because the more free the society, the less corrupted it is. Country of Trinidad and Tobago, the region of Central America and the Caribbean, according to its characteristics is slightly better than the South American countries. Norway, as the only investigated country of the European region, is totally different from all the studied countries. It represents a highly industrialized, very rich country, where incomes from oil exploitation are partly preserved and partly used for the common good. Norway does not generate the majority of GDP from oil exports, but only goods exports, and has built a strong and independent institutions that ensure the collection of tax revenues and prevent significant corruption.
3. CONCLUSION

A survey conducted in 30 countries in six regions of the world, showed that there are differences among the countries highly dependent on the export of non-renewable energy sources. When it comes to dependence on the exploitation and export of oil / gas, it should be noted that some of these regions become large areas of exploitation and export of oil / gas at different times, and they also have vastly different political traditions and systems, and also the stages of economic development. However, despite some regional particularities that distinguish the countries of certain regions, the negative impact of dependence on exports of the mineral wealth represents a pattern that occurs among the studied countries in all regions. This pattern confirms the thesis that the high dependence on exports of mineral resources, whether it is oil, gas or minerals, enhances corruption of the public sector (rare, specific exceptions prove the rule) and has a negative impact on the degree of political freedom.

Also, the impact of dependence on exports of natural resources, especially when it comes to minerals, negatively affects the degree of inequality and poverty in a particular society. Exceptions are countries that become dependent on natural resources after they already built institutions, the tax system and other sectors of the economy (and therefore are not highly dependent on the export of mineral wealth!), or individual countries that have succeeded or are struggling to succeed in the development of other sectors of economy and a wealth of natural resources (primarily the monarchies of the Arabian peninsula) is enough to provide a high level of social and health security and protection and low levels of corruption perceptions of the public sector. However, these achievements are still accompanied by a very low degree of political freedom. Therefore, it shows that in some countries the redistribution of income from the export of natural resources does not necessarily lead to a greater degree of democracy in a society. However, at the same time, it can lead to lower social inequalities, a greater degree of political stability, a lower degree of corruption of the public sector, but also that more profit remains in the country that exports of natural resources. Of course, the question is whether it is possible in the long term, with the above achievements, to compensate and maintain a lack of political freedoms. Different trends show the diversity of world regions. Combination of greater or smaller presence of political freedom, a lower degree of corruption of the public sector and increase of the quality of life of the majority of the population, is possible in some countries of South America or the Arabian peninsula monarchies and state Brunei, though (so far) is not possible in sub-Saharan Africa, the post-Soviet space or in North Africa, which indicates that the theses that these countries, depending on the region of the world in which they are located, have varying degrees of negative common features that are characteristic for the countries dependent on exports of natural resources, making the “curse of natural resources” regionally distinctive, but still very influential.

LITERATURE


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DESTINATION BRANDING. THE UNIQUE DESTINATION PROPOSITION CREATION: MEDITERRANEAN AS IT SHOULD BE

MIRNA ĆORIĆ
IGOR VUKASOVIĆ

ABSTRACT

Destination branding is more than an image-building campaign: it requires a long term commitment and it has to synergize with different influential stakeholders both in the creation process as well as in brand implementation. The latest literature argues that the truly powerful destination brands are linked with internal stakeholders having a clear idea what their destination represents and how it differs from other destinations. Some argue that a country can never be branded in traditional corporate sense, but one can work on destination reputation management and advertise its resources, specifics and unique propositions. A strong brand provides added value and brings a powerful identity benefit, it drives consumers’ behavior and influences their perception of reality, at the same time creating trust and possible relationships with the brands’ origin and finally increasing positive expectations that result in positive economic impact. For a long time Croatian tourism offer has been a somewhat basic and superficial exploration of natural resources and concept of “sea, sun, sand” known also as the “3s” or the “Sea&Sun” concept. Also, Croatian offer neglected the potential of Croatian specific and authentic products and services (e.g. food and drinks). In other words, for a long time there has be no long term institutional and national consensus on destination branding strategy and unique direction Croatia should follow in order to position itself on the market. Some things have changed for the better during the last few years, but even more has to be done.

The aim of the paper is to explore Croatia beyond its Mediterranean destination image, and as a modern destination brand with significant tourism potential, as well as to point out and strategize already existing positive associations which should be the foundation to build upon in order to boost attractiveness and subsequently investments to the country. The research objective is to analyse Croatian tourism situation and its prospects and suggest ways in which Croatia can adopt strategic integrated marketing communication in order to manage its reputation and unique proposition thus moving from the present ‘Mediterranean as it once was’ concept and upgraidng its offer into ‘Mediterranean as it should be’ focusing on its future potential. Additionally, paper argues that Croatia and its destination branding strategy need to ‘catch the train’ of demographic change and lifestyles of modern consumers.

KEYWORDS: Mediterranean, destination, branding, unique, proposition, authenticable, country of origin, production, natural.

1. INTRODUCTION (motivation, aims overview)

The increasing competition in the global tourism market forces destinations to develop adequate positioning strategies and an effective marketing plan that will clearly differentiate them from competitors in the marketplace. Therefore, many authors suggest that tourism destination branding represents the most obvious means by which destinations can distinguish themselves from the mass of commodity destinations around the world and thus a powerful marketing tool to tackle increasing competition, product similarity and substitutability on the tourism market.

To achieve successful destination branding, destination marketers are increasingly focusing on the tourist experience and creating marketing messages based on these experiences that will appeal to the emotions of potential travelers. In order to be chosen as a preferred one and to transmit a favorable image to potential tourists and to create a competitive position, destination management organizations (DMOs) today are confronted with growing requirements for information about tourist behavior, needs and desires. Travel and tourism research has in the past more than three decades demonstrated that a destination branding among tourists is a valuable and irreplaceable concept in understanding the destination selection process.

This paper deals with the past and present Croatian destination branding issues and practices, which are compared with an example of successful destination branding practices, Spain. Paper also highlights intentions of Croatian Ministry of Tourism to improve downturns of acquired practices. Empirical study resulted in a research conducted among students of two Croatian Universities, and it reflects their opinions on how Croatia has established itself in respect to their efforts about destination branding and furthermore suggests possibilities for improvement. The student segment of the travel industry was chosen because not only is it vast but also economically important, as it represents a significant portion of present, but more importantly future travelers that like to travel and have time and means to pursue it, with expectations their disposable income will grow with time to come.

2. BRANDING THE DESTINATION – CORE CONCEPTS

The literature offers various definitions of the term “brand”, the key being the understanding of what one wishes to achieve with a particular product, service, organization, person, event and/or destination. The American Marketing Association defines a brand as a name, term, design, symbol or any other feature that identifies one seller’s goods or service as distinct from those of another⁶.

The United Kingdom Chartered Institute of Marketing goes beyond this and links the product or service with the reaction it inspires in consumers: “The set of physical attributes of a product or service, together with the beliefs and expectations surrounding it – a unique combination which the name or logo of the product or service should evoke in the mind of the audience”⁷. Brand differentiates products and represents a promise of value⁸. Brands provide social and emotional value to users; they have personality and in the end can enhance the perceived utility and desirability. Brands are defined with equity for both customers and investors⁹ which are translated into customer preference, loyalty, performance, social image, value, trustworthiness and identification⁹.

Destination brand can behave just like a corporate brand, providing an umbrella of trust, a guarantee of quality and give room for sub brands on the market¹⁰. The idea that countries behave like brands is not so unfamiliar to most marketers and politicians¹¹. In order to brand tourism destinations it is necessary to select a consistent element mix to identify and distinguish a destination through positive image building that influences consumers’ decisions¹².

Branding a country can lead to better image. Country’s brand image can shape its economic (higher exports, inward investments, tourism), cultural and political aspects and finally its future. The ultimate goal of any destination is to ensure that visitor experiences and interactions with visited country are positive ones and that it produces desires and actual repeated visits to that same destination which leads to more brand equity. Experiences pointed earlier should involve interaction with communication means (brochures, digital communication, social networks, campaigns, public and media relations), interaction with cultural, social and natural aspects of the country¹³. Thus, brand positioning, brand proposition and brand management where destination is the brand, becomes critical in attracting global capital. Specialized creative and research agencies, under supervision and guidance of DMOs can help destinations develop their brand by providing independent, experienced analysis, which is essential to underpin a sustainable destination brand. But branding itself is, and should be the national consensus of those leading the country, and subsequently all involved in the process¹⁴.

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¹ Handbook of Tourism Destination Branding (2010), UNWTO and ETC
¹⁰ Handbook of Tourism Destination Branding (2010), UNWTO and ETC
2.1. Elements of destination branding

Choice of vacation destination has become a significant lifestyle indicator for a customer and because of this a place where they decide to spend few days off has to be emotionally appealing, which indicates that the battle over a customer will be fought not over price but over hearts and minds. A destination brand represents a dynamic interaction between the destination’s core assets (its landscape, people, culture and history) and the way in which potential visitors perceive them.

For the purpose of this article, authors tried to summarize literature into three branding aspects. The first relates to the definition and development of brand identity, which is also the first stage of destination branding process. Branding activities primarily have an internal focus on clarifying the desired image in the market: umbrella strategies and studies regarding brand decision making by main actors and involvement of host community. The second stage in destination branding is segmenting and positioning the brand in the market to achieve the desired brand identity. These activities are therefore of the highest profile in terms of representing brands’ public image. It is the promise a destination gives about itself and its core assets. The third aspect relates to measuring the performance of the brand. Brand equity is both a measure of brands success in achieving the desired brand identity, as well a predictor of its future performance. In other words, it is the involvement of industry actors, stimulation of repeated purchase and loyalty, effectiveness of slogans, logos and creative ideas around the brand strategy.

2.2. Holistic approach on destination branding and its key components

Destination brand is the fundamental building block from which all marketing communications and behavior should flow. To create a fair, rounded and attractive picture of a destination in people’s minds, a balance must be maintained between the different images. This is what is witnessed through tourism/destination branding campaigns – slogans, symbols and messages communicated. To be truly effective, there must be harmony between both the visitors and the resident’s perceptions of what the destination brand is, what its key assets are and the way in which it is presented through integrated marketing communications. The main aim is to create a competitive identity, which enables the destination to stand out above its competitors. Competitive identity can rise from potential competitive advantages one country possesses, whether that is a beautiful landscape, clear sea, islands, people, sports, culture, exports, great gastronomy and so on, with the important task being to leverage these.

Marketing communications are concerned with selecting an optimal push and pull strategies, comprehensive mix of media and other channels (like direct response advertising, trade promotions, digital marketing and event management and sponsorship) to support marketing programs and enhance brand identity through spreading activation. Depending on destination’s image, messages of tourist boards or national campaigns will be more or less believable, and in the long run, destinations with more positive image will need to work less, and subsequently spend less on promotion. But the destination’s work on itself never stops, as nor do the tourism trends and tourist preferences that are constantly changing. Meaning destination’s complacency is the first step in the sure to follow downwards spiral.

Destination branding alone cannot change a nation’s image. There are many other factors – other sectors, sources of information and people – that contribute to the way in which a nation is perceived. Destination branding can, however, play a major part, as tourism is often the ‘loudest’ of all the voices that talk about the country externally. No single national stakeholder has control over all of the factors that affect a country’s reputation. Partnership between stakeholders in all private and public sectors – business, civil society, exports, cultural organizations, central and local government is therefore essential. They all need to convey destinations unanimous positive image and have to do so consistently and comprehensively. A country inherits most of its strongest assets (e.g. people, history, culture, landscape). One of the biggest challenges in destination branding therefore lies in the ability to include different influential stakeholders both in the creation process as well as in brand implementation. The latest literature argues that the truly powerful destination brands are linked with internal stakeholders having a clear idea what their destination represents and how it differs from other destinations. Country branding involves numerous internal stakeholder groups, from country managers and marketers employed at governmental level to the locals, who live the brand. Naturally, when building a brand, internal stakeholders must also keep in mind the perceptions of external stakeholders.
2.3. Effective destination branding: Spain and Croatia examples

One of the most successful destination power brands is Spain. Once destination with an image for poor-quality services and facilities, in the early 1980s the Spain government began what was to become the most consistent and successful story of tourism destination branding still going on today\textsuperscript{25}. Tourism and its related activities is a huge contributor to the Spanish economy. In 2014 Spain was the third most visited country in the world (after France and USA) with almost sixty one million visits.\textsuperscript{26}

While the national España is the main brand, its sub brands are all cities and regions, e.g. Andalucia, Galicia, Barcelona, Madrid, Valencia and so on\textsuperscript{27}. At the national level Spain is constantly present in its advertising and its campaigns. At the heart of the brand for over 30 year has been Joan Miró’s logo, designed in 1983. As a piece of modern art, this logo both symbolizes Spain’s past and looks to the future, and incorporates representations of sun, stars and the bullring to portray Spain. The shifts in the campaign from ‘Everything under the sun’ (1984) to ‘Passion for life’ (1992-95), ‘Bravo Spain’ (1997), ‘Spain marks’ (2001-2005), ‘Smile, you are in Spain’ (2005-2010) to the latest ‘I need Spain’ have been gradual and well thought through, in order not to compromise brand value\textsuperscript{28}. Early campaigns placed more attention on portraying diversity and variety of the country; focusing on heritage and culture, food and drinks, sea and sand. Last campaigns, from 1997 on, tried to disassociate themselves from sun and beach image “selling” not only destinations but emotions these were trying to convey\textsuperscript{29}. The success story of Spain shows that destinations can become brands that are timeless. It is not however easy to come to that level. In the case of Spain, this meant creating a public-private partnership to reposition the country on a global stage\textsuperscript{30}.

Croatia is somewhere in the middle of trying to reach Spain’s level of desired positioning. In pre-1991 Yugoslavia, Croatia was the essential ingredient of country’s tourism product. In the early days of Croatian destination promotion, that fact was a ground on which communication was based. National tourism marketing policy and destination re-positioning was initially set in three directions: differentiating clearly the country from its neighbors; reassuring former markets that quality and the value have been restored; and knowing that Tourism is Croatia’s strongest economic attribute\textsuperscript{31}.

Croatia’s attempts of destination branding were complemented by tourism marketing logo from 1990s: a half circle of multicolored balls radiating from half orange to half-red sun like ball, with word Croatia bellow, symbolizing conjunction of sun and sea, while the new slogan was ‘Croatia: Small country for a great holiday’, which was used till 2001. From then on, Croatia tried to reestablish its brand on international market through different visual codes that appeared on food items, souvenirs, National Sports teams’ uniforms, etc. Now, the last days are counted down for the slogan ‘Mediterannean as it once was’, which is one of two official slogans, lasting for almost fourteen years\textsuperscript{32}.

Though the literature is not vast to confirm the realm of Croatian destination branding, some findings say that Croatia did not have a clear image because there was not a recognizable economic and marketing identity from which to develop it. This image, despite increasing levels of international arrivals and receipts, is still unclear\textsuperscript{33}. This is furthermore backed up with Ratomir Ivicic’s, acting Croatian Tourist Board (HTZ) director presentation at a conference on the national tourism sector in 2014 when he, in light of surveys showing that its current brand is globally unrecognizable\textsuperscript{34}, announced a new tender as a part of strategic marketing plan for the national tourism sector for the period until 2020.

Aside from the rebranding, Croatia’s tourism sector also needs new products, with more emphasis also needing to be put on specific destinations rather than the country imagery. Meaning, a more efficient interface between coast and interior/continental has to be established, and especially in segments of cultural tourism, gastro-eno tourism and ecotourism\textsuperscript{35}. Croatia has attracted the attention of the world and one can argue it has winning cards in its hands, but also that these have to be played well. With the implementation of a comprehensive tourism strategy, stakeholder cooperation and modernized integrated marketing communication Croatia can systematically rejuvenate its destination brand and continue building on its tourism, because its brand is lately losing ground\textsuperscript{36}.

\textsuperscript{26} Telegraph newspapers, http://www.telegraph.co.uk/travel/travelnews/11027765/The-worlds-most-visited-countries-2014.html?frame=3003407
\textsuperscript{32} http://www.vecenjeri.hr/kompanije-i-trzista/pper-slogan-hrvatskog-turizma-bit-ce-poznat-do-krava-veljace-985113 (taken over 22 January 2015)
\textsuperscript{34} http://www.mint.hr/default.aspx?id=18070 (taken over 21 January 2015)
\textsuperscript{36} http://www.croatiaweek.com/project-croatia-365-gathering-place/, (taken over 22 January 2015)
This is seen in Bloom’s Country Brand Ranking 2015 in which Croatia was ranked 12th in Europe37, meaning one place lower than a year before, while according to the FutureBrand’s Country Brand Index 2014-2015 (CBI) Croatia took 44th place38, three places below the CBI 2012-2013 result, while in CBI’s 2006 Report it was named as one of three global tourism rising stars39. Potential is there, but it has to be realized and worked on.

2.4. Croatian Tourism Strategy – a step in the right direction

‘Croatian Tourism Development 2020 Strategy’ produced by the Croatian Government has structured its vision of tourism in three categories: What should Croatian tourism be (promotion, all year long, whole nation coverage, diversified, innovative and adjustable to personal preferences), Key prerequisites of development (long-term protection and sustainable development of ecosystems, competitiveness and attractive investment profile, State assets used in tourism development, increase of knowledge and skills in all areas, destination management) and Attracting demand (hospitality, quality and excellence, authenticity, security, variety of content and impressions)40.

In line with this the strategic goals and assignments set by the ‘2020 Strategy’ are: encouragement of economic growth based on market integration and institutional reforms, higher rate of employment, and promotion of sustainable development. Integrated part of all three is the increase of structure and quality of accommodation; new investments and tourism generated spending growth. Still, the main goal is the increase of Croatian tourism’s attractively and competitiveness as well as making the TOP 20 global destinations by ‘competitiveness’ criteria41.

In terms of competitiveness the World Economic Forum’s The Travel & Tourism Competitiveness Report 2013 (T&TCI) sees Croatian in 35th place overall, meaning down one place in comparison to 2011, but with the same 4.6 score42. T&TCI also ranks Croatia 23rd in regional European terms43, emphasizing that Croatia is well known for its tourism (29th overall in affinity for Travel & Tourism) and that its performance has remained stable over the last several editions.

But mentioned is Croatia’s high dependency on quality of its natural environment for leisure tourism stressing the importance of sustainable development in this field. In order to improve the sector’s competitiveness further, and despite that it ranks 5th overall in category Tourism-specific infrastructure, T&TCI points out that Croatia should upgrade its ground transport infrastructure, particularly its railroads and ports, but also its air travel infrastructure. More efforts should also be devoted to ensuring that Croatia’s policy rules and regulations are supportive of developing the sector as it’s only ranked 96th in this subindex with improvements required in FDI, property rights protection, and bureaucracy areas44.

Despite the fact that the T&TCI data are not bad per say, even very good in certain segments, one thing that cannot be neglected is that Croatia in overall ranking is trailing behind its Mediterranean peers (Spain 4th, France 7th, Portugal 20th, Malta 24th, Italy 26th, Cyprus 29th, Greece 32nd), which besides the necessary structural measures also raises a question is the key tourism message „Mediterranean as it once was“, the platform on which a future driven development can be communicated. Business data for 2013 and period January-October 2014 are good, but still the longevity of this platform is under question with also Croatian Tourist Board (HTZ) at the moment analyzing proposals of five creative agencies that were short-listed in an international tender on the ‘Future Croatian Tourism Story’ topic45.

According to ‘SEE Sector Analysis’ prepared by Croatia’s Hypo Alpe-Adria-Bank (HAAB) and for the period January to October 2014 physical indicators displayed a moderate result for tourist industry in first half of 2014 for Croatia, Slovenia and Serbia, with 1.9% yoy rise in overall tourist overnights largely driven by Croatian market. A 4.7% yoy rise in Croatia’s total tourist overnight was strongly influenced by 5.0% yoy rise in foreign tourist overnights, whereas domestic tourist nights rose by 3.3% yoy with noticeable higher expenditure of tourists in Croatia46. According to HAAB analysis Croatian tourism sector was mostly benefiting from tentative stabilization in households’ spending fundamentals in Italy, while negative influences come from the EU-required visa policy for Russian citizens, as was evident from the noticeable decline among tourists from Russia (13.2%)47.

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42 The Travel & Tourism Competitiveness Report 2013, World Economic Forum, page 146
43 The Travel & Tourism Competitiveness Report 2013, World Economic Forum, page xvii
44 The Travel & Tourism Competitiveness Report 2013, World Economic Forum, page 16
45 Kovacevic, Radmila, ‘Creators of the „When you are hungry you are not you are also working on the bait for tourists“, Vecernji list – daily newspaper, 27 December 2014, pages 24 and 25
46 Hypo Alpe-Adria-Bank Croatia, ‘SEE Sector Analysis’, September 2014, page 4
Potential catalysts for future lay in Croatia’s accession to EU that boosted its image in non-traditional outbound markets (e.g. China, UK, US) and enabled access to development funds for upgrade of infrastructure (expansion of airports in Zagreb, Mali Losinj), upgrade of infrastructure, consolidation of accommodation supply via standardization of private bed places and reduction of their overall share in supply, upgrading existing hotels in terms of overall quality (3 to 4 stars) and new service offerings thus leveraging natural resources by focusing on health (e.g. nursing homes) and wellness (e.g. spa) and sport tourism (hiking, trekking, cycling). Risks on the underhand lay in highly fragmented supply results in low overall quality, inconsistent price ranges, lower revenue and scarce product offerings (hotels are < 20% capacities in Croatia, vs. 50%+ in Mediterranean peers), highly uncertain institutional environment, with frequent changes of VAT rates, potential increase of tourist residence tax, unresolved ‘tourism land’ issue, potential real estate tax, shortage of qualified staff (both blue and white collar) and recovery of Mediterranean markets, most notably Greece, alongside rationing of travel budgets.

Accordingly, ‘Strategy 2020’ operational strategies that should pave the way of tourism policy until 2020 were divided in five categories: Marketing, Development of Tourism Offer, Investments, Development of Human Resources and Process Management.

1. Marketing activities are focused on promotion of Croatia’s expanding tourism portfolio, quality brand management and at five key markets-categories segmented into: Leading, Inclined, Neighboring, Challenging and Distant, with the addition of India and Brazil. Croatian Tourist Board has for 2015 put extra focus on promotion, with advertising in 2015 starting earlier than the previous years, with increased activities both offline (budget of EUR 2.65 million) and online (budget of EUR 4.4 million + EUR 660ths for social networks) that will be implemented on 18 key markets. Primary markets are: Germany, Austria, the United Kingdom, Scandinavian countries, Italy, France, Slovenia, Croatia, Benelux countries, Switzerland, Spain, USA and Japan, while the secondary ones are: Poland, Russia, Czech Republic, Hungary and Slovakia.

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2. Development of tourism’s offer is primary focused on development and upgrade of: Sea&Sun, which is the dominant Croatian tourism product through accommodation capacities and quality increase, development of new attractions and tourism types, ‘eco’ certification, etc. The goal of Nautical tourism in which 60% of revenue was generated from permanent moorings, 15% came from transit boats, 17% from other revenue (F&B, leasing of retail space, charter etc.) and the rest from maintenance is to build 15,000 new berths and marinas for mega yachts and increase of service quality. Health and Wellness tourism is attributed with higher repeat visitation and higher expenditure per trip (108% higher vs. classic international travel, 145% vs. domestic trips) development priorities are seen in setting minimal standards and cooperation with international destination with focus being on dental medicine, plastic surgery, orthopedic and physical therapy. Cultural tourism’s priorities lay in investments in recognizable cultural attractions (UNESCO locations, archeological findings, castles...) and development of theme roads, cultural entertainment and sports event. In Business tourism priorities are the development of infrastructure in general and development of congress tourism capacities, while at the same time getting new brands in the hotel offerings and establishing more flight destinations. Croatian capital Zagreb saw a growth at CAGR 11.3% despite its disadvantages being the lacking of a modern and larger conference capacities and pricier flight fares while Dubrovnik grew at CAGR 9.6%.

For elevating the profile of a desired Golf tourism destination building of 30 high-quality golf courses is needed. In terms of Cycle tourism the goal is for Croatia to become one of the leading Mediterranean cycle tourism destinations through development of thematic bike parks and areas, trans European routes, trails, accommodation and hospitality measures covering whole of Croatia, while Adventure and Sports tourism development puts special focus on diving and sea kayaking niches through development of modern competitions and manifestations. Rural and Mountain tourism requires modernization of centers and product portfolio, development of rural economy and new content. Eno & Gastro tourism’s goal is to become one of the fastest growing Mediterranean gourmet destinations with focus on building new infrastructure, gastro-eno excellence and above all branding of national authentic cuisine.
3. Investments are in total expected to be up to EUR 7 billion total, in the period up to year 2020, and are to be achieved through construction of new hotels and resorts (20,000 new hotel rooms, EUR 2.2 billion), reconstruction of existing hotel capacities (EUR 825 million), investments into small family hotels and boarding houses, small recognizable cruiser-hotels, camps, private renters, nautical ports, new attractions, infrastructure, while creating a more friendly investor environment e.g. better legal procedures, less red tape, special status for investments exceeding EUR 50 Euros, special credit lines over CBRD and more efficient usage EU funds. Investment activities in the last decade were mostly limited to refurbishment of existing accommodation capacities; quality upgrades of hotels and resorts, and categorization of previously unregistered camp sites. Although new hotel openings were hitherto of smaller size and family-owned, several new upper-scale hotels have lately been announced and one opened (5 star Valamar’s Dubrovnik President). New hotel development on the Adriatic shore usually has the following financial parameters: payback period 10-12 years, WACC 9% and 3-4% interest rate on CBRD loan. Largest SEE tourist companies have been investing heavily during the last four years (CAGR 23%) and spending in average 17% of annual sales on capex. An average Adriatic hotel has to invest between 3% and 6% of annual sales to remain in a good competitive condition, according to industry sources, while in the view of HAAB analysts an even higher level is required to keep up with technological change and prevent functional obsolescence. M&A activity in tourism intensified lately in Croatia due to high consolidation potential, increased attractiveness after EU entry with the largest recent deal being EUR120 million, acquisition of 93% share in Istraturist by Plava Laguna which created the company at par with hitherto the largest Croatian hotelier Valamar Adria Holding, while the largest players planned to invest over 220 million Euros in 2014.

Supply of categorized beds in Croatia is expanding at a faster pace (CAGR 9.1%) than demand (tourist arrivals’ CAGR 5.5%) increasing competitive pressure on TOP4 players, with daily revenue per available room (RevPAR) increased in 2013 mostly thanks to higher pricing. Occupancy rates on the other hand stagnated in hotels (0.2% yoy) and declined in A&Rs (-3.5% yoy) and camps (-2.4% yoy).

Looking ahead, international tourist companies are likely to intensify expansion to SEE region, especially to Croatia where the consolidation potential is high, privatizations are accelerating, and per room valuations are attractive (median EUR40t vs. European EUR216t in 2013). Also as campsites are the fastest growing segment of supply (CAGR 20.1% in 2010-13 period) HAAB analysts expect camp beds to remain the fastest growing category in the following years, given their less capital intensive nature and high profitability.

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Hypo Alpe-Adria-Bank Croatia, ‘SEE Sector Analysis’, September 2014, page 8
4. Development of Human Resources, a category in which Croatia ranks only 93rd in the T&TCI\(^\text{71}\) is to be developed through introduction of regional centers for education, with additional 2 to 3 excellence centers for practical education, establishment of private hotel hospitality and tourism management institutions, and introduction of tourism education in elementary schools\(^\text{72}\). With also HTZ creating a new position responsible exclusively for brand management.

5. Process Management has to be more efficient with better coordination between institution, policy makers and stakeholders, with better implementation control and better promotion on local, regional, national and international levels with HTZ elevating its role as a modern Destination Management Organization.\(^\text{73}\)

2.5. ‘Mediterranean as it once was’ as seen by the Youths segment – Empirical study

As part of the analysis a survey among the students of Faculty of Political Science, University of Zagreb (FPZG) and privately owned Edward Bernays Colleague of Communication Management (EBCCM) was conducted in the period 15 December 2014 to 14 January 2015. The goal was to see the perception of particularly the younger generation (aged 21 to 29) and how they value the present tourism situation in Croatia and accordingly its tourism image, but also to get their opinion on the past and present campaigns used in the promotion of Croatian tourism.

Both surveys were done personally by the researchers, with the total survey having 26 questions, some of which were multiple choices, some open type. In total 96 graduate students participated in the surveys. Concretely, 64 out of 124 (52%) seniors that took the course ‘Identity, Image and Brand Management’ at FPZG, and 32 out of 42 (76%) juniors that took the course ‘Tourist Destination Management’ at the EBCCM.

Undeniably, the sample is not representative for the whole student population in Croatia, let alone the country in general, but still it is an indicator of how the young tech-savvy, travel prone and very critical new generations, that will in a few years be the main drivers of the tourism, perceive the promotional efforts in this industry that is crucial for Croatian economy with 16.5% (EUR 7.2 billion) contribution to local GDP in 2013, while in I-IX 2014 period it was 20.9% (EUR 6.774 billion), meaning a 2.5% or EUR 168 million increase in comparison to the same period in 2013 (EUR 6.606 billion).\(^\text{74}\)

The survey showed that 26% of the interviewees travel both to Croatian destinations and abroad, while 22% choose solely Croatian destinations for their holidays and yearly vacations (defined as 6 and over overnight stays). Interestingly enough and what is a positive attribute for Croatian tourism is the fact than 0% the 96 interviewees vacations solely abroad. This of course has to be interpreted with care, due to present personal income of the interviewees which is on a monthly average below 450 US$, explaining that 81% points out the price as the determining factor in choosing the vacation destination. Finances are followed by the provided content (69%), recommendation from a trustworthy source (42%), accessibility (23%), and availability of information while researching the destination (8%), marketing campaigns (6%), personal desires 4% and time at disposal (2%).

Croatian tourism also has a much better image than the Croatian State with 73% interviewees stating they see Croatian tourism as positive, while 28% see it as being neutral. The numbers for the State were somewhat lower with 31% seeing it image being positive, 52% as neutral and 17% even as negative.

\(^{71}\) The Travel & Tourism Competitiveness Report 2013, World Economic Forum, page 147


\(^{73}\) Croatian Tourism Development 2020 Strategy, Croatian Government, 2013, page 60

In regard to the biggest city brand the interviewees almost unanimously (94%) chose Dubrovnik that in 2014 attracted 863,801 tourist arrivals (12% more than the previous year), with foreign tourists making up 813,363 of the total arrivals (up 13%)\textsuperscript{35}. National capital Zagreb was in 2014 named the second best European destination, behind Porto, and who is again nominated for the same award in 2015\textsuperscript{36}, which is an improvement from 2009 when NYT in a basically positive article nevertheless wrote: “Croatian capital is in the midst of an identity crisis”, got 4%. Option ‘None’ got 2%.

In terms of a regional destination brand Dalmatia got 50%, Istria 40%, with Zagreb getting 4%, while Slavonia and Baranja, Kvarner and ‘None’ got 2% each.

As the biggest Croatian destination attraction chosen was the old city of Dubrovnik with 46%, the Adriatic and its islands got 27% (out of which predominantly the island of Hvar with 69%), national park Plitvice 23%, while Diocletian Palace in Split and sea organs in the city of Zadar each got 2%.

Talking in consideration that the survey was conducted with students that have a relatively higher education in the field of integrated marketing communications and brand management the most surprising result was that only 8% of them knew ‘Mediterranean as it once was’ was the present “representative” of Croatian tourism. This clearly indicates that this segment of the population, that consumes the Internet and social media considerably more than other media channels, was not reached, or was not seen as a target audience by the tourism authorities which in the opinion of the researchers would be a mistake, especially as Croats are logically listed as one of the leading markets in the ‘Strategy 2020’ with expected average yearly growth rate of 1 to 2%, while this age group is a strategic primary target segment for Sea&Sun, Cycle, Adventure and Other products.

Taking and in-depth look in the interviewees familiarity with the present and past promotional campaigns the results of the survey in which interviewees were to name all the campaigns they were familiar with as follows: ‘Small Country for a Great Holiday’ heard of by 75%, ‘Heaven on Earth’ by 10%, ‘Mediterranean as it once was’ by 58%, ‘When the Heart Says Summer, it Says Croatia!’ by 98%, ‘So Beautiful, so Close’ by 33%, ‘Croatia, World of Diversity’ by 0%, ‘Visit Croatia, Share Croatia’ by 29% and ‘Croatia 365’ by 16%.

Interestingly enough and taking into consideration that the more recent campaigns have influenced the perception of the audience, the oldest ‘Small Country for a Great Holiday’ received a better recognition that the ‘Mediterranean as it once was’ which has been running since 2001 and is still as an umbrella brand on all tourism materials. This implies that the present slogan doesn’t deliver to the fullest in the desired way and that future communication has to be revised to be strategically, not literally, Mediterranean as it should be.

This is even more evident in the question of the likeness of mentioned slogans and campaigns where ‘Small Country for a Great Holiday’ is liked by 83% interviewees, ‘Heaven on Earth’ by 21%, ‘When the Heart Says Summer, it Says Croatia!’ by 70%, ‘So Beautiful, so Close’ by 56%, ‘Croatia, World of Diversity’ by 17%, ‘Visit Croatia, Share Croatia’ by 58%, ‘Croatia 365’ by 56%, while the running ‘Mediterranean as it once was’ was liked by only 15%, with the most frequent comments being; it focuses on the past and that it’s old and outdated (46%), it’s boring, it doesn’t differentiate from the competition and is not catchy (17%).

This is not in line with some of the international media coverage on Croatia, e.g. in 2010 in Mirror’s section Travel there was a very positive article especially on this aspect of the communication in which the author wrote: „The tourist board tagline is ‘Mediterranean as it used to be’ and, for once, the ad people have got it spot on. Made up of almost 1200 islands, only 67 of which are inhabited, and for the most part, blissfully unspoiled, it’s easy to imagine that you’re in a world far away from hectic modern life”\textsuperscript{37}.

Still, the article in the four years since it was published, speaking in modern “currency” got only five shares. In May 2014 Mirror again had a very positive article stating that: „Croatia is a popular destination for a sun, sea and sand break but there’s so much more to this country”, emphasizing cycling, kayaking, sailing, lighthouses, etc.\textsuperscript{38} One would say the things that are ‘trending’ in today’s global tourism industry not those that “once were” or that would be associated with the essence of Mediterranean.

Also in comparison with its Mediterranean peers in terms of marketing communications the interviewees were asked to grade from 0 to 5, with 5 being the highest grade, the national slogans they find the best. In this, call it a competition, the best was ‘Smile, you are in Spain!’ with an average grade of 3.56, followed by Greece’s ‘The true experience’ 3.15, with ‘Made in Italy’ in third place with 2.83. Fourth was Turkey’s ‘Home of History, Tradition and Adventure’ with 2.23, ‘Visit Portugal’ took fifth place with 0.9 and in the last place Croatia with 0.8, showing that, unlike in the Eurosong, patriotism

\textsuperscript{36} NovaTV national TV, http://dnevnik.hr/vijesti/hrvatska/os-jedno-priznanje-zagreb-proglasen-drugom-najboljom-europskom-
destinacijom—323414.html (taken over 15 January 2015)
\textsuperscript{37} Mirror Online, http://www.mirror.co.uk/lifestyle/travel/croatias-coast-is-dazzling-says-nikki-219745, (taken over 14 January 2015)
\textsuperscript{38} Mirror Online, http://www.mirror.co.uk/lifestyle/travel/top-10-croatia-breaks-reveal-3484716, (taken over 14 January 2015)
played no role in grading the ‘Mediterranean as it once was’. Indicating that perhaps it’s time to stop being nostalgic and focus on the future.

A positive step in this direction is project ‘Croatia 365’ which has in September been launched by the Tourism Ministry as an attempt to battle seasonality and get the tourist ‘in’ whole year long. ‘Croatia 365’ focuses on out-of-season. The project has six main areas: Culture, Gastronomy and Wine, Active Tourism, Bike Tourism, Health & Wellness and Business Tourism39.

As the key problems the interviewees point out the promotion with 27% (out of which the in general promotional efforts account for 62% of the issue, while too much promotion being set only on the Adriatic, meaning the 1980’s ‘Sea & Sun’ aspect got 38%). The lack of content was seen as the second biggest problem with 25%, while the people managing the tourism and the system’s lack of implementing the set strategy was third with 24%. On the other hand the biggest potential is seen in Croatia’s natural beauty 77% (out of which the Adriatic accounts for 74%, the paradox being that the same interviewees criticized the running slogan and promotional efforts being too much focused on the sea aspect), location and climate 10% and gastro and enology 8%.

Taking into consideration that only 4% of interviewees pointed price as one of the Croatian tourism problems, we asked them if the price was not a factor and for the same price they could travel to one desired Mediterranean locations which one would it be 27% chose France, 25% Spain, 19% Portugal, 15% Greece, 8%, Italy 4% Turkey and again at the end Croatia with 2%. This can be attributed to the psychological aspect that one always desires what the neighbor has and that the domestic destinations have likely been visited, but still it is also a wakeup call as obviously the interviewees, meaning the domestic public and as such the one that is the cheapest to interest is looking elsewhere. This could be a dangerous trend. Not perhaps at the moment as the 2014 tourism numbers have been very good, with Tourism Minister Darko Lorenčin saying that 2014 could be equal in tourism revenue to the record year 2008, with 2014 seeing 13.05 million arrivals, up 5% on 2013, and 73.6 million bed/nights, up 2%40 and added that EUR 483 million would be invested in the sector in 2015.

According to preliminary Croatian National Bank (CNB) data, Croatia earned EUR 6.77 billion from foreign tourists in the first nine months of 2014; an increase of 2.5% on the year and that in Q341, revenue amounted to EUR 4.65 billion, surpassing the record Q3 in 2008. And this despite by bad weather effected July and August that are traditionally the peak of the tourism season. Still, the increase in revenues generated by foreign tourists in the first three quarters of 2014 was slower than in 2013.

In 2014, foreign tourists generated 11.7 million arrivals, up 5.2% on the year, and 67 million bed/nights, up 2.2%. Domestic tourists generated a 1% increase in arrivals and a 0.6% increase in bed/nights42.German tourists accounted for the most bed/nights last year (21%) followed by Slovenes (11%), Austrians (8%), the Czech (7%), Italians and Poles (6% each), Slovaks (3.5%), the Dutch (3.3%), the British and Hungarians (3% each). Last year also saw an increase in bed/ nights from the US (17.2%), the UK and Hungary (9% each), Bosnia and Herzegovina (8.6%), Austria (3%), Slovenia (2%) and Germany (1.5%)43.

The rationale behind the ‘Mediterranean as it once was’ slogan and campaigns is an evident attempt to highlight the aspect of preserved natural beauty, rich cultural heritage and an easy going way of life, and this in combination with certain modern benefits it offers is in no way a bad strategy, even on the contrary as is seen by the 2014 data. This view is shared by some international media like e.g. Huffington Post that describes Brela as a “the secret European retreat you’ve been dreaming of”44, or Dubrovnik again making the ‘Top 10 Places in Europe that you have to see before you die’ list45, or Plitvice whose waterfalls have been called “some of the most beautiful to be found among UNESCO World Heritage Sites”46. But at the same time through this Croatia is communication-wise primarily positioned as a desired destination for those tourists that are looking for peace and quiet, meaning the traditional 1980’s ‘Sea&Sun’ product. In terms of modern tourism trends and taking in consideration that Croatia is price-wise ranked 109th in T&T industry47, this is an aspect of tourism promotion that should be looked into as to see if it needs to be updated. In certain industries retro is ‘in’, but in tourism looking backwards can mean the destinations could likely miss out on what’s happening now, and more importantly where the tourism industry and tourist preferences are headed.

47 The Travel & Tourism Competitiveness Report 2013, World Economic Forum, page 146
3. CONCLUSION

Tourism’s importance across the region will continue to grow in the long term, according to T&TCl, signaling opportunities for new ventures. Croatian tourism’s contribution to GDP and employment is expected to grow at the fastest pace throughout 2020. HAAB sees Croatia as the fastest growing SEE leisure market in terms of both demand and supply with foreign tourists remaining the main drivers of tourism sector receipts, while hotel beds will lead the expansion in medium to long term as the highly fragmented Croatian accommodation market won’t be able to capture increasing demand, both in terms of quantity and quality. Hotel expansion will find additional support by M&A activity, as the government will privatize its numerous but outdated hotel assets, and as international hotel companies will intensify expansion of their brands to SEE region, attracted by relatively lower valuations.

Coming back to the survey results in order to reap the benefits of its tourism, Internet presence must be increased along with introducing more possibilities of designing a holiday i.e. a la cart packages and attracting international travelers. For this to work to the full extent the communication must be focused on the future and in line with the brand promise, as to quote an old Chinese proverb: “The best time to plant a tree was 20 years ago. The second best time is now” and its ‘organic’ sequel provided by Warren Buffet: “Someone’s sitting in the shade today because someone planted a tree a long time ago.” “Once was” served Croatia well, but it’s not a good message that answers to modern tourism trends that demand from Croatia to find the answer to “what it can be”.

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EXAMPLE OF DECISION MAKING IN HUMAN RESOURCE MANAGEMENT USING ANALYTIC HIERARCHY PROCESS
SUZANA SRSEK
SANJANA BUC
SVEA KRŠUL

ABSTRACT
One of the functional domains within human resource management is the recruitment of employees for the organization. Selecting the best candidate is a complex issue that involves decision making based on multiple criteria. This paper explores the process of finding the best candidate for a particular area of work by applying multiple criteria decision making models. The practical application of the analytic hierarchy process (AHP) method in multi-criteria decision making methods is shown as part of human resource management. It also demonstrates the utilization of this method when put in practice in the context of a greater satisfaction of employees and managers when decisions are taken. The application of the AHP multiple criteria decision making method has been performed in a state-owned organization in Croatia with the purpose of selecting candidates for a hypothetical position. For this purpose, the key criteria for evaluating the candidates have been identified and different weights to each criterion have been set. A total of 16 criteria have been used for the analysis of five alternatives using the Expert Choice Tools. A survey has been conducted (both among the candidates and the committee) and the results have shown that all the respondents have a positive attitude towards the application of AHP method in the selection of human resources. A recommendation for future research is: to create an AHP model for rewarding employees in the organization and to examine the impact of the group decision making in the AHP method on the entire process of selection of candidates.

KEY WORDS: multi-criteria decision making, AHP method, human resource management, selection.

1. INTRODUCTION
Both in the business and private environment people are faced with the daily need to solve various problems. Problem solution can be defined as a process of identifying the differences between the current and the desired situation and undertaking appropriate activities to eliminate these differences. An integral part of problem solution is decision making. The decision making process consists of the identification and definition of the problem, determination of the set of alternative solutions (if they exist), the set of criteria for evaluating the alternatives and their analysis in order to reach a decision on the selection of the optimal alternative.

Multi-criteria decision making involves a greater number of characteristics which describe different alternatives essential for the solution of the problem. In multi-criteria decision making the main issue is to assess correctly the importance of factors and develop a priority system which can lead to the decision on the selection of the best alternative. (Sokač, Ugarković and Tunjić, 2008).

Nowadays there are numerous quantitative methods in multi-criteria decision making e.g. Electra, Promethee, Analytic Hierarchy Process (AHP) etc. The selection of the method depends, among other things, on the kind of problem, availability of appropriate tools and personal preferences of the decision maker. This paper presents the AHP method of multi-criteria decision making on the example of the selection of human resources in a state-owned organisation.

In order to apply the AHP method successfully in the human resource management it is important to develop a good decision-making model. Kashi and Friedrich (2013) defined in their paper four groups of criteria which make top management successful: technical competencies, personal qualities, interpersonal competencies and managerial competencies. Gregov (2012) developed in her paper a multi-criteria selection model for the evaluation of faculty members at universities of applied sciences by means of the AHP method to identify the lecturers who are most likely to contribute to achieving the aims of the organisation. In some earlier papers Gregov and other authors emphasised the importance of a quality selection process in human resource management (Gregov, Meter and Bratnar Kovačević, 2009).

The primary objective of the survey described in this paper is to demonstrate the practical application of the AHP method of multi-criteria decision making in human resource management for the selection of candidates concerning decisions on placement and promotion of employees. The secondary objective is to show the usefulness of practical application of this method in the context of greater employee and manager satisfaction with the reached decisions.
2. RECRUITMENT AND SELECTION OF HUMAN RESOURCES

The area of human resources has been identified in the current literature on management as one of the most prosperous ones when it comes to the survival of the overall economic system. The level of development, competitiveness and survival of the business greatly depends on its ability to effectively manage all aspects of human resource management such as recruitment, selection, monitoring, motivating, rewarding, promoting, development and training of individual human resources. This area was researched extensively throughout history e.g. Hawthorne effect studies by Elton Mayo and associates from 1927 to 1930, Maslow theory of motivation in 1943, Herzberg theory in 1959, Likert’s concept of human resources in 1961 and many others (Buble, 2006).

According to their definition human resources are ‘overall knowledge, skills, abilities, creative potential, motivation and loyalty available to an organisation or a society. Human resources are the total intellectual and psychological energy which an organisation can mobilize for aim achievement and business development’ (Bahtijarević-Šiber, 1999, p. 16). In addition, ‘human resource management consists of a range of mutually connected managerial activities and tasks in an organisation directed at ensuring an adequate number and structure of employees, their knowledge, skills, interests, motivation and behaviour patterns required for the achievement of current, developmental and strategic aims of the organisation’ (Bahtijarević-Šiber, 1999, p. 17).

The term human resource management has a wide range of meanings today, so it is categorised as a scientific discipline, managerial function, separate business function in an organisation and a specific philosophy of management. In older literature human resource management is explained through industrial relations, employee relations, personnel administration and personnel function, whereas current literature uses the terms management or human resource function (Jambrek and Penić, 2008). Human resource function in the management of an organisation is based on a series of different activities and tasks regarding human resources in cooperation with other functions within the organisation aimed at quality enhancement and greater employee satisfaction.

Recruitment and selection of skilled employees is one of important segments of human resource management because it is the way in which highly skilled and competent staff are attracted, who are the key to the success of any organisation. Recruitment is defined as the process of attracting candidates for open positions possessing the abilities, skills and personal qualities required for strong performance and aim achievement. It is a set of procedures for determining the qualities required from the applicants followed by the selection process. Recruitment and selection of human resources present a process of aligning professional preferences and goals of an individual with the preferences and requirements of the organisation. The selection process involves application of predetermined standardised methods and techniques to select the candidates that are best suited for the requirements of the vacant position. The main objective of the selection process is to forecast and maximise the performance of the staff and the whole organisation (Bahtijarević-Šiber, 1999).

The key step in the selection phase of human resource management is the decision on the appropriate method for the analysis of individual qualities and determination of compatibility between the requirements of the assignment or open position at hand and individual potential. The choice of the appropriate method depends on the type of the organisation hiring, vacancy for which the applicants are screened, overall policy, employment strategy, requirements for the position, panel members consisting of professionals specialising in the selection process of the human resource function, as well as the philosophy and attitudes of the management board.

3. EMPIRICAL RESEARCH

The organisation in which the research was conducted hires mostly in the IT sector. Since this sector involves specific area of work, it is not enough to evaluate the candidates’ general competencies. The standard selection procedure in the company includes the testing of the applicants’ general competence which the company has mapped and a few rounds of interviews by immediate superiors and other managers. The selection is based on the opinion of the panellists about individual candidates whereas the professional competencies are very rarely examined. As the selection process is important for the organisation, it is a lengthy process that is time-consuming for everyone involved. Regardless of whether the selection is external or internal, the procedure lasts up to a few months depending on the number of applicants and the complexity of the open position.

In order to prove that the application of the AHP method is better than the existing one for reaching a decision in the above stated situations two research hypotheses have been put forward in this paper in accordance with the established goals:
H1: Based on the defined criteria it is possible to apply the AHP method of multi-criteria decision making for the selection of the best candidate in the process of placement and promotion of employees.

H2: Employees and their managers have a more positive attitude about the decisions on candidate selection reached by the application of the AHP method than they used to have before its application.

3.1. Research methodology

In the course of research, in addition to studying relevant literature, the following methods were applied: desk research, ‘face to face’ interview, survey, analysis, AHP method, simulation method and synthesis. During desk research the existing data on current ways of decision making when shortlisting the candidates inside the selected organisation were gathered. In this paper, apart from interviews with managers, the survey method was used on random samples with closed questions put to the employees about the level of satisfaction with the selection process and its results using the current selection methods compared to the application of the AHP method (to verify the second hypothesis). The analysed data were gathered by means of desk research, interviews and surveys.

AHP (Analytic Hierarchy Process) is one of the best known and most widely used methods for multi-criteria decision making, introduced by Thomas Saaty. The AHP method is best suited for dealing with complex decision problems consisting of a goal or a focus, criteria, subcriteria, and alternatives while the decision-making process (choice of available options or their ranking) is based on more attributes having different levels of importance and are assigned different scores. (Hunjak and Begičević-Redep, n. d.).

The methodology of the AHP approach is based on structuring a complex decision problem by decomposing it into a hierarchy of more easily solved sub problems which are consequently ranked. Figure 1 shows an example of a hierarchically analysed problem in the form of an AHP model where $K_1...K_n$ denote criteria, and $A_1....A_n$ alternatives of the AHP model (Buć, 2007).

**Figure 1. AHP model**

![AHP model diagram](image)


The technique itself can be described in four steps (Saaty, 1980). In the first step the decision problem is structured into a hierarchy with a goal at the topmost level, criteria and subcriteria at the intermediate levels and the alternatives at the lowest levels. The second step comprises the pairwise comparison of the criteria and setting of the priorities of the decision maker which are assigned a weight on Saaty 9-point scale of relative importance. Even numbers denote basic values whereas odd numbers denote intermediate values. An example of Saaty scale of relative importance is shown in Table 1.
Table 1. Saaty scale of relative importance

<table>
<thead>
<tr>
<th>Intensity of importance</th>
<th>definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Equal importance</td>
</tr>
<tr>
<td>2</td>
<td>Equal to moderate importance</td>
</tr>
<tr>
<td>3</td>
<td>Moderate importance</td>
</tr>
<tr>
<td>4</td>
<td>Moderate to strong importance</td>
</tr>
<tr>
<td>5</td>
<td>Strong importance</td>
</tr>
<tr>
<td>6</td>
<td>Strong to very strong importance</td>
</tr>
<tr>
<td>7</td>
<td>Very strong importance</td>
</tr>
<tr>
<td>8</td>
<td>Very strong to absolute importance</td>
</tr>
<tr>
<td>9</td>
<td>Absolute (extreme) importance</td>
</tr>
</tbody>
</table>

In the third step of carrying out the AHP based on the evaluation of relative importance of the elements of hierarchy structure, using a mathematical model local priorities of criteria, subcriteria and alternatives are calculated and then synthesised into overall priorities of the alternatives. The overall relative score for each option is obtained by weighted summation of its local priorities and the weight of the higher level elements. The last AHP step involves the sensitivity analysis performance.

3.2. Data collection and analysis

Research was conducted in seven phases:

Phase 1: identification of general and specific competencies
Phase 2: competency mapping for a hypothetical position
Phase 3: implementation of the common selection process
Phase 4: construction of AHP model
Phase 5: implementation of the selection process using the AHP model
Phase 6: carrying out a survey on attitudes
Phase 7: analysis of research findings and performing sensitivity analysis

In the first research phase the data within the organisation was gathered studying various work instructions and procedures, analysing the procedures for employee and candidate evaluation for the position in the IT sector and conducting interviews with IT managers and psychologists in the HR department. The outcome of this phase was a catalogue of general and specific competencies in the organisation for positions in the IT sector.

In the second phase a hypothetical position was defined and candidates who work at similar positions were selected, who demonstrated high motivation level for further training and promotion. General and specific competencies were singled out which were considered to have the strongest impact on the performance at the hypothetical position.

The third phase was the common selection process used in the organisation. Since the process involves completing forms that are secret for this organisation, they have not been presented in this paper. The selection process consisted of a test by which information on all general competencies defined in the organisation catalogue were collected, and an unstructured interview.

In the fourth phase the AHP model was created, the goal and decision-making table were defined and the required data entered. In addition, this phase involved the evaluation of the defined criteria, i.e. the pairwise comparison was performed and the weight of all criteria obtained.

In the fifth phase the selection process using the AHP model created in the previous phase took place. Before that, additional questions had been put in order to obtain information on specific competencies. Experts for this field in the
IT sector prepared special tests to this end. For each test the candidate could be awarded a grade from 1 to 5, where 5 was the best grade. Since the tests are owned by the organisation and present protected forms they have not been shown in this paper.

During the sixth phase surveys with candidates and panellists conducting the selection process were carried out. It was clearly explained to the candidates that the written part on general competencies was the same in both processes and that Selection 1 comprises the interviews with the panel and Section 2 written tests. Attitudes were tested by means of Likert scale where 1 means ‘I don’t like it at all’, 2 ‘I don’t like it’, 3 ‘I neither like it nor dislike it’, 4 ‘I like it’ and 5 ‘I totally like it’. Moreover, a short, unstructured interview was conducted with each candidate where they could express their attitudes to both selection procedures. The same questionnaire was given to the selection panel members who were also interviewed.

In the seventh phase the sensitivity analysis and the analysis of the findings of the AHP method and conducted research were performed. The research findings and main conclusions were presented.

### 3.3. AHP model

The objective of the creation of AHP model is to identify the candidate whose competencies will be best suited to the hypothetical position of a tester of IT (Information Technology) solutions. This position involves writing of test scenarios and scripts, testing and validation of IT solutions. The criteria in this model are competencies divided into two categories: general and specific.

Within **general competencies** 10 criteria have been defined (internal data of the organisation):

- **Analytic thinking (AT)** – candidate is able to collect all relevant information, establish the facts, divide complex assignments into parts, relate and compare data from different sources and establish cause-effect relations among them.

- **Sharing of knowledge and information (SKI)** – candidate helps other employees to develop their knowledge and skills, to understand tasks and solve problems, demonstrates own knowledge to others, gives examples to illustrate this knowledge, presents professional innovations, disseminates timely obtained information, is able to provide internal training and has a positive attitude to knowledge sharing.

- **Flexibility (FL)** – candidate can adapt to new and unexpected situations, can adjust their activities to specific situations, is open to new ideas and different opinions, can change their own plan or integrate it with other goals and is capable of adjusting to the needs of the others.

- **Innovativeness (IN)** – candidate is capable of generating their own ideas, isn’t limited by other people’s thinking, introduces innovation into business operations, contributes to the creating of a positive atmosphere and is oriented at efficacy and optimisation of the processes.

- **Communication skills (CS)** – candidate can communicate openly and frankly with other people, show respect, adapt to the communication style of interlocutors, listen actively, summarises and puts additional questions to check mutual understanding, presents efficiently complex messages and communicates rationally and accurately own ideas, opinions and information.

- **Lifelong learning (LL)** – candidate follows regularly existing trends and extends own knowledge and skills, seeks actively and incorporates new knowledge into current work methods, expects feedback on their performance and searches continually for more appropriate ways of learning in order to boost business efficiency.

- **Problem solution (PS)** – candidate is able to identify the problem and the information pertinent to that problem, make the analysis and come to a solution which will result in the removal of the problem.

- **Time management (TM)** – candidate has realistic business plans, is able to set priorities and meet deadlines, organises and distributes own assignments, is capable of working simultaneously at different tasks and using time efficiently.

- **Team work (TW)** – candidate is open for cooperation with others, promotes cooperative behaviour, supports and encourages colleagues, helps them in their work, speaks positively about the team members and provides them with constructive feedback, shares credit for team success, fosters cooperation within the team and among different teams.

- **Focus on details (FD)** – candidate pays close attention to details and analyses all segments of work, works precisely and thoroughly, provides information within deadlines, follows procedures, prepares reports and documents and complies with rules and regulations, schedules and timescales to avoid missing fine details.
Specific competencies are divided into two subcategories:

Technical knowledge which comprises the following competencies:

Knowledge of work technology – candidate is familiar with state-of-the-art technology employed in the organisation and worldwide

Knowledge of computing – candidate knows how to use a computer, install program packages and connect to remote computers

Knowledge of basic program packages – candidate knows how to use MS Office suite, using actively Word and Excel

Expert knowledge which comprises the following competencies:

Knowledge of the programming language Java (Java)

Knowledge of the MS SQL script language (SQL)

Knowledge of UML diagrams (UML)

The hierarchy structure is visually depicted in Figure 2:

For pairwise evaluation the network version of Expert Choice decision-making software was used.

The team who worked on pairwise comparisons consisted of three members (psychologist, line manager and sector manager) who first compared the criteria to decide on the relative importance of each criterion.

The pairwise comparison of general and specific competency criteria was slightly different from other comparisons which were made according to Saaty scale. For this comparison a rating scale of 100 categories was applied, since only two criteria are compared at the same hierarchy level, so a scale of 100 categories is more precise when it comes to defining the relations. This comparison is depicted in Figure 3.
Figure 3. Comparison of general and specific competency

The priorities of General competency criteria are depicted in Figure 4. The inconsistency ratio for these comparisons was 0.08.

Figure 4. Priority of Objectives for General competencies

After the comparison of all General competency criteria, the comparison of Specific competency criteria was made, where a slight priority was given to Expert knowledge (20%) over Technical knowledge, as shown in Figure 5.

Figure 5. Comparison of Criteria Technical knowledge and Expert knowledge

The comparison of Specific competency criteria comprised all criteria in the Technical knowledge group whose findings are depicted in Figure 6. The inconsistency ratio for these comparisons was 0.04.

Figure 6. Priority of objectives for Technical knowledge

The comparison for Expert knowledge was made in the same way.
The comparison results for all employees are depicted in Figure 7. Employee 1 had global priority by all criteria.

**Figure 7.** Comparison results for all employees

<table>
<thead>
<tr>
<th>Alternatives</th>
<th>Global Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee 1</td>
<td>31.51 %</td>
</tr>
<tr>
<td>Employee 2</td>
<td>24.23 %</td>
</tr>
<tr>
<td>Employee 3</td>
<td>29.30 %</td>
</tr>
<tr>
<td>Employee 4</td>
<td>3.40 %</td>
</tr>
<tr>
<td>Employee 5</td>
<td>6.35 %</td>
</tr>
</tbody>
</table>

Source: Author’s work using programming tool

3.4. Sensitivity analysis

Expert Choice decision-making software provides sensitivity analysis using the following methods/graphs: dynamic sensitivity, performance sensitivity, gradient sensitivity and 2D analysis.

**Dynamic Sensitivity** examines the dynamics of option priority change if the weight assigned to each criterion is changed. This enables an overview of the total participation of single criterion weight in the overall alternative priorities. Graph 1 shows the dynamic sensitivity of the main objectives General competencies and Specific Competencies.

**Graph 1.** Dynamic sensitivity of General competencies and Specific competencies

**Performance Sensitivity** illustrates the impact of individual criteria weights on the current and overall alternative ranking. By changing the weight of each criterion we can observe how alternative priorities change. However, this analysis does not include the change in criteria weight since this had been done in the previous analysis. Graph 2 depicts performance sensitivity of General competencies.

**Graph 2.** Performance sensitivity of General competencies

Source: Author’s work using programming tool
In this criteria group the greatest dominance has Employee 1. This alternative is dominant in the criteria Analytic thinking, Innovativeness, Lifelong learning and Problem solution. The dominance of other alternatives by a single criterion can be recognized by analogy.

**Gradient Sensitivity** describes how option priorities are sensitive to the weight change of individual criteria. The vertical axis represents the ratio of importance priorities of the observed criterion. Graph 3 presents the sensitivity gradient of all alternatives for General competencies.

**Graph 3.** Sensitivity gradient of alternatives for General competencies

![Graph 3](image)

Source: Author’s work using programming tool

The graph shows that when the priority of a General competency rises so does the priority of alternatives Employee 1, Employee 2 and Employee 4, whereas the priority of Employee 3 falls. The priority of the alternative Employee 5 does not depend on the change of criteria importance levels.

**The graph 2D analysis** shows the relations among alternatives according to two criteria. One criterion in on axis X, the other one on axis Y, while the circles represent alternatives. Better alternatives are closer to upper right corner, whereas the worse ones are closer to the down left corner. Due to the tool limitations the relations of only two criteria that are offered have been presented. Graph 4 depicts the relation of all alternatives according to the criteria General competencies and Specific competencies.

**Graph 4.** Relation of alternatives according to the criteria of General competencies and specific competencies

![Graph 4](image)

Source: Author’s work using programming tool

The graph shows that no alternative dominates over others by both criteria. According to the criterion General competencies the alternative Employee 1 dominates, whereas the alternative Employee 3 dominates by the criterion Specific competencies.
3.5. Findings of empirical research

Using AHP method the priorities of all criteria have been determined for the evaluation of alternatives, i.e. applicants for the hypothetical vacancy. Local and global priorities are shown in Table 2.

The findings of the research indicate the acceptance of hypothesis H1: Based on defined criteria it is possible to apply the AHP method of multi-criteria decision making for the selection of the best candidate in the process of placement and promotion of employees.

The findings of the candidate attitudes to the selection process that took place show that the average grade for Selection 1 (currently used process) was 2, which was also the most frequent grade. Selection 2 (application of AHP method) was awarded a much higher grade, the average was 4.6.

Table 2. Criteria priorities

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Local Priority</th>
<th>Global Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selection of the best candidate for a hypothetical position</td>
<td>100.00 %</td>
<td>100.00 %</td>
</tr>
<tr>
<td>General competencies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Analytic thinking</td>
<td>41.67 %</td>
<td>41.67 %</td>
</tr>
<tr>
<td>Sharing of knowledge and information</td>
<td>29.28 %</td>
<td>29.28 %</td>
</tr>
<tr>
<td>Flexibility</td>
<td>2.66 %</td>
<td>1.11 %</td>
</tr>
<tr>
<td>Innovativeness</td>
<td>7.02 %</td>
<td>2.92 %</td>
</tr>
<tr>
<td>Communication skills</td>
<td>3.96 %</td>
<td>1.65 %</td>
</tr>
<tr>
<td>Lifelong learning</td>
<td>12.38 %</td>
<td>5.16 %</td>
</tr>
<tr>
<td>Problem solution</td>
<td>11.69 %</td>
<td>4.87 %</td>
</tr>
<tr>
<td>Time management</td>
<td>2.10 %</td>
<td>0.88 %</td>
</tr>
<tr>
<td>Team work</td>
<td>5.51 %</td>
<td>2.30 %</td>
</tr>
<tr>
<td>Focus on details</td>
<td>23.86 %</td>
<td>9.94 %</td>
</tr>
<tr>
<td>Specific competencies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technical knowledge</td>
<td>58.33 %</td>
<td>58.33 %</td>
</tr>
<tr>
<td>Knowledge of work technology</td>
<td>45.45 %</td>
<td>26.52 %</td>
</tr>
<tr>
<td>Knowledge of computing</td>
<td>25.39 %</td>
<td>6.73 %</td>
</tr>
<tr>
<td>Knowledge of basic program packages</td>
<td>31.19 %</td>
<td>8.27 %</td>
</tr>
<tr>
<td>Expert knowledge</td>
<td>43.42 %</td>
<td>11.51 %</td>
</tr>
<tr>
<td>Knowledge of the programming language Java</td>
<td>54.55 %</td>
<td>31.82 %</td>
</tr>
<tr>
<td>Knowledge of MS SQL script language</td>
<td>24.87 %</td>
<td>7.91 %</td>
</tr>
<tr>
<td>Knowledge of UML diagrams</td>
<td>44.25 %</td>
<td>14.08 %</td>
</tr>
<tr>
<td></td>
<td>30.88 %</td>
<td>9.83 %</td>
</tr>
</tbody>
</table>

Source: Author’s work using programming tool

The majority of candidates believe that in Selection 1 process subjective attitudes of the selection panel members dominated, that the questions were not focused and that the candidate was selected on the basis of subjective impression gained at the given moment. The candidates liked the fact that practical knowledge played an important role in Selection 2, the panellists were more focused, the whole selection process was more objective and the best candidate was selected in a fair way.

The findings of the panellists’ attitudes to the selection process that took place show that the average grade for Selection 1 was 2.33, which is also the most frequent grade. Selection 2 got an average grade 4.67 which is even slightly higher than the average grade awarded by the candidates.

The panel members think that the second selection process was much more focused, it was easier to evaluate the candidates and the whole process was significantly more precise than the first one. In the first selection process they did not know which characteristics they should evaluate in candidates. Moreover, because of the vast number of criteria affecting the final decision they were not able to identify the best possible alternative. Although the second selection process was considerably more time consuming, the panel members felt much better about it, especially about the fact that they were able to quantify their decision.

This leads to the conclusion that the hypothesis H2 has also been accepted: Employees and their managers have a more positive attitude to the decisions on candidate selection reached by the application of the AHP method than they used to have to the decisions reached before the application of this method.
4. CONCLUSION

This paper examines an example of AHP method application in the selection area of human resource management. The selection process is a complex one and has only one goal: the selection of the best candidate. In the empirical part of the research, which was conducted through different phases, criteria for the evaluation of alternatives were identified. The competencies were divided into two groups: general and specific. Within general competencies ten subcriteria were defined, while specific competencies were divided into two subcriteria each consisting of three subcriteria of the second level. The criteria weight was determined by the AHP method pairwise comparison and the same method was used for the evaluation of all alternatives.

The purpose of this paper was to demonstrate the possibility of application of AHP method, which was accomplished by designing two selection procedures that illustrated all the advantages of the application of this method. The findings of the empirical research showed that it is possible to apply the AHP method of multi-criteria decision making for the selection of the best candidate in the process of placement and promotion of employees (H1) and that employees and their managers have more positive attitudes to decisions on candidate selection by the application of AHP method than they used to have to decisions reached before the application of this method (H2).

The application of AHP method in the selection process has demonstrated many advantages: the observed competencies have clearly been defined, priorities of individual competencies have been defined, many experts from various areas have participated in the evaluation, the influence of subjective attitudes has been diminished, the outcome of the selection can be quantified, the selection process is aimed at the evaluation of key competencies of the candidates, once defined criteria weight can be applied in other evaluations as well.

The limitations of this research are related to the fact that due to the lengthy procedure of criteria comparison and pair alternatives the procedure was conducted for five alternatives. With the addition of more alternatives the complexity of the model increases rapidly. Other limitations concerned the fact that group decision making was not possible because of the programming tool limitations and the time limitations of the participants in this research.

The recommendation for future research is to create an AHP model for rewarding employees in the organisation in order to promote the employees more fairly. Such a model would help to foster a fairer distribution of rewards in human resource management. Additionally, it is possible to examine the impact of group decision making in the AHP method on the entire selection process.

LITERATURE

ABSTRACT
Brands are the most important asset of a company as they represent its identity and image. Their rise is not a recent phenomenon, but today they have an essential role in business. The reason for that is the strong image they call up in consumers’ minds and value they add to consumers but also producers. Here, thus, is considered branding as an integral part in the success of the brand. Obviously, brand can be managed in many ways, but the most important thing is to establish a meaning of the brand that is relevant and valuable to consumers. Creating the image of the brand that stands out certainly help achieve that. In addition, CSR (CSR - Corporate Social Responsibility) is a relatively recent phenomenon which is gaining in popularity worldwide, especially in EU, and therefore is used more and more by companies as a tool for achieving competitive advantage and capturing market share.

The purpose of this paper, in respect to that, is to show how well-thought brand management and efficient implementation of CSR can allow company to achieve success on the market and be competitive. For this aim, the case of struggling Croatian SMEs (SME(s) – Small and Medium Enterprise(s) as presented by the case of company “IGO-MAT” (and their “Samoborska salama” brand) is taken, however with the mention of other companies as well.

The paper is strictly theoretical, with data used from books, articles but also from internal interview with the owner of the company “IGO-MAT”. Conclusion of the paper is that CSR and brand management do help companies in being competitive and succeeding on the market as is evidently shown on the case of Croatian SMEs, especially “IGO-MAT” and results support that as companies in question did in fact succeed in the market.

KEYWORDS: brands, brand management, CSR, SMEs, competitive advantage, market, “IGO-MAT” company.

1. INTRODUCTION

The topic of this paper is to show how Corporate Social Responsibility (CSR) and good brand management can be used by small and medium enterprises (SMEs) to better distinguish themselves from other bigger companies and eventually to succeed on the market. For that purpose the case of Croatian SMEs as presented by the company “IGO-MAT” is taken. Also, explained in the paper are the themes of brand and brand management and Corporate Social Responsibility and their importance.

Accordingly, the structure of the paper is divided as follows: first part will be about brands, what brands are and why they are significant, second part will deal with the issue of brand management, third part will shed some light on the phenomenon of Corporate Social Responsibility, henceforth addressed simply as CSR, and fourth part will focus on Croatian SME “IGO-MAT”, how they developed and manage(d) their brand and used CSR as its competitive advantage all to succeed on the market. Finally, the fifth part of the paper will be conclusion consisting of the main points and remarks of the paper.

2. ABOUT BRANDS

It is known that brand can be name, term, symbol, sign, anything that makes a service or good recognizable and distinguishes it from all other services or goods. There are many definitions of brand, but most of them are similar and refer to a distinguishable and recognizable feature of certain company’s products. For example, Rik Riezebos in his book “Brand Management” defines brand as follows: “A brand is every sign that is capable of distinguishing the goods or services of a company.”

The roots of brand can be traced to Greek and Roman times as in those times there existed markings applied to pieces of silver, sings or route descriptions to shops, and the signboards of shops which usually showed only pictures of products sold there due to high illiteracy among public. Yet, first brands comparable to

[^1]: Riezebos, R. et al. (2003), Brand Management: A Theoretical and Practical Approach, Harlow, Essex: Pearson Education Ltd, p. 32
the todays brands started to appear and were introduced after the Middle Ages and brand development started to get speed with the beginning of Industrial Revolution in 1830 which lasted till 1870 and during which many brands were developed. That was due to the increased urbanization and population density, mass production, improved manufacture, and increased availability of branded articles due to higher number of shops and groceries. Not to go too much into the history of brand development, by the end of the 20th century came a realization among managers that established brands represent a certain value for the company. Consequently, brand was now seen as the most valuable possession of a company, which they were and are still today. Moreover, today brands, as Olins stresses out, “have become a social and cultural phenomenon with the most extraordinary strength and power”, be it in sports, business, the arts or charities.

Brands are created by marketers for companies to persuade, or seduce as Olins would say, customers into buying its products and they achieve this by “creating and projecting colourful but simple ideas clearly, again and again.” Their role is dual – they attract, persuade new customers (outsiders) to buy the products while at the same time they persuade the existing ones (insiders) to believe and to keep on buying the products. They come in many different shapes and sizes and they can have different characteristics but essentially it is what they represent that bears significance and value making them powerful, so-called brand value. Olins writes: “The power of a brand derives from a curious mixture of how it performs and what it stands for. When a brands gets the mix right it makes us, the people who buy it, feel that it adds something to our idea of ourselves.” With that said, following question may come to mind: how is it that brands are such a strong presence and unique manifestation in ours today’s world? Olins answers it nice and clear: “Simply because in a world that is bewildering in terms of competitive clamour, in which rational choice has become almost impossible, brands represent clarity, reassurance, consistency, status, membership – everything that enables human beings to help define themselves. Brands represent identity.”

So, in respect to that, what is meant by brand is a mark (product) that is accepted by the consumers, with which they can identify with, and through this also identify themselves. Now brand is not only about expressing yourself (“I want to buy this brand (product) because it suits me, I can relate to that.”), but actually being yourself (“I am buying this brand (product) because that is me.”) It is achievement of this jump what makes a brand the brand. Suddenly, brand is not only a brand, but a belief, idea, world of its own. This is what distinguishes a truly successful and recognized brand from all other brands. As such, brand is created, logically, in consumers’ minds as a “mental concept of associations and experiences.” It is a job of a branding to create this distinctiveness, this identity and ideas what brand is about and to transfer this into their minds.

To conclude, brand brings a promise of performance, experience, identity and emotional relation/connection with a consumer and if this promise is not fulfilled consumer will not buy this brand (again).

3. BRAND MANAGEMENT

Moving now to the issue of brand management, although having a good brand that immediately stands out and is recognizable (and here under consideration is, foremost, visual brand identity) certainly helps in establishing oneself and succeeding on the market it is not nearly enough. Also what is needed is sound, efficient and well-and-thoroughly thought brand management. Branding, and brand management just so, is not a onetime process, work, something that is done once and then left on its own, but rather it is and should be a continual process constantly thought of and worked on. Having that in mind a good brand should, before else, satisfy following criteria: clear message, credibility, connection with the customers on emotional level, motivation to the buyers, and establishment of user loyalty. Apart from that, in order to achieve success the understanding of customers’ needs and wants is crucial. What you, as a company, want and should try to accomplish is not just that the potential customers choose you over the competition but also to see you as “the only one that provides a solution to their problem.” That way you can make strong, constant presence in their minds in terms of your product(s) and form a firm loyalty of your customers.

For that you first need to establish a brand strategy and there are two parameters from which you can choose to make grounds for your brand strategy; differentiation and added value. As Riezebos explains, by differentiation “a company tries to distinguish its product from that of the competition”, which means that competition is the motive and competitive advantage the goal. Added value, on the other hand, implies that a branded product has more value than the product per se. This added value can be attained either by product’s functional value, that is it’s physical/tangible asset such as greater quality or longer durability, or by intangible aspect (non-functional value) such as meaning it has to a customer.

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3 Op.cit., p. 16
4 Op.cit., adapted, pg. 27
5 Pavlek, Z. (2008), Branding, Zagreb: M.E.P . Consult, p. 121, adapted
7 Riezebos, R. et al. (2003), ibid. pgs. 17-18
With that the issue of identity of the brand comes next, and that is the essentiality and should be the point from where everything else emanates. When identity of a brand is being created, developed what that actually spells out is the creation, development of differences, either tangible (lower cost, better quality, etc.) or intangible ("feel", experience, taste...) which then consumers recognize and accept and make decisions upon those characteristics, values, depending on their preferences. As such, brand follows mission, vision and everything else related to management, all what company is trying to achieve and is about. It is necessary then to have a brand and brand identity that are strong enough to survive in the long run. Only afterwards can marketing program and brand management be tackled and dealt with as to further enhance the brand and brand reputation in question. Without clear path, vision and goal you as a company cannot expect to succeed on the market in the long run.

Once you get brand strategy all set and brand identity done, you have to decide how you are going to position your brand in relation to the market, to competitors and targeted customers. One part of positioning choice depends on a relative price of your branded product and other on attributes it has to offer, be it tangible or intangible. When it comes to choosing which price to charge the following strategies are possible: low-cost pricing strategy (which is setting the lowest possible price in order to capture as large as possible share of the market), premium pricing strategy (setting the price at high level, higher actually than product may actually worth as to put in consumers´ minds that such products are of greater quality and better reputation) and prestige pricing strategy (setting the high price similar to premium price level, but also includes certain exclusivity in it). With premium and prestige pricing strategy it is more the question of product´s diversity, it`s differential advantage while low-cost pricing strategy means identification with the more successful and/or more highly positioned branded product that in this case serves as a role-model, so to say.

Moving on to brand attributes, or intrinsic dimension of positioning, there are two approaches: functional approach and expressive approach. Functional approach is taken when brand is positioned in a way that emphasis is put on its intrinsic values, either instrumental or impressive aspects of them. Instrumental aspects of intrinsic values or attributes would be brand`s intrinsic attributes themselves, such as their contents or material they are made of, while impressive aspects would be its advantages or benefits. Expressive approach, however, rests on the basis of experience the brand gives to consumers. To put it more clearly, it relies on psychosocial meaning of the brand to consumers, on emotions, wherein the brand name "communicates" with the consumers who then know what they are buying.

Once these basic points are decided upon next thing to do is build up an intended meaning of a brand and this is done by deciding which value or values should the brand represent. Of course, chosen value(s) should be incorporated and visible in everything related to the brand, from advertisement to packaging. When considering brand values three aspirational levels should be taken into account: need driven level is chosen when a brand relates to material and biological consumer needs, outer-directed when it relates to consumers´ relational needs and inner-directed when it relates to consumers´ self-actualization needs. Also taken into account should be the characteristics of the product and of the organization and competition. Important is to note here that there are no limits in how many aspirational levels, and values, brand can have, however it is necessary to describe the ones on which product is focused.

Moreover, brand image is also extremely important, and it consists of three components:\[1\]: content, which is associations a brand name invoke in consumers and those relate to cognition, knowledge, feelings and smells and sounds; second component of a brand image is its favorability, which translates into the “feeling” consumers have in relation to each association and third is its strength. This strength is determined by the power of the link of an association with the brand. What name brand carries should also not be forgotten as it can call up in consumers´ minds both the associations of the name itself and the associations related to the brand. Finally, acknowledged as well should be the relationship needed between the product and the brand (considering type of positioning and possible extensions) and brand design thoughtfully developed and managed. And when we talk about brand design, especially important is the logo design as it has “a central place in the communication and presentation of the brand. (...) A logo can ensure a quick recognition of the brand and its design can bring certain associations to the mind.”\[2\] Identification, differentiation, communication of brand values, attractiveness and familiarity are criteria for an apt and successful logo design. To conclude, design is along with the brand name and the brand image one of the foundations and essential elements of brand development and management.

Brands and brand management, in short, are important for several reasons: creating the differences against number of other products, expressing characteristics of a product and reducing shopping risk for consumers while also attracting and retaining them, making strategic planning and determining goals easier for the company, serving as identifications and signals, warrants of quality, safety and assurance for consumers and establishing ‘special’ long-term relation between the company and consumers and building trust, which in the end affects company’s overall wealth.\[3\]

\[1\] From: op.cit.
\[2\] Op. cit., p. 139
4. CORPORATE SOCIAL RESPONSIBILITY

CSR is a relatively recent phenomenon that everybody is talking about nowadays and that is constantly, thus, gaining in popularity and importance. It is almost self-defining term that means that business is made in a socially responsible way both human-wise (in terms of treatment of employees and other stakeholders) and nature-wise (in terms of caring about and preserving the natural environment). By European Commission, CSR is defined as “the responsibility of enterprises for their impacts on society” (COM (2011) 681), or in words of Mallen Baker, an expert on CSR and a former politician: “CSR is about how companies manage the business processes to produce an overall positive impact on society.”

Exhibit 1. CSR & Business

When talking about CSR, Baker argues: “Companies need to answer to two aspects of their operations:

1. The quality of their management - both in terms of people and processes (the inner circle)
2. The nature of, and quantity of their impact on society in the various areas”

Author of this paper agrees. It is about time that people and companies stop thinking just about short-term goals, gains and profits, but start looking at the big picture, at how operations and actions impact their environment. Natural resources after all are not unlimited and Earth is one, not to mention we all live in it. So, considering the state we got ourselves and our planet in, the change, shift from short-run thinking to long-run thinking is necessary and should start being the norm rather sooner than later. CSR in that sense is a good thing and although definitions of it may differ in some way across the world from a society to society the bottom-line stays the same: it is about doing business in socially responsible way. That can be translated into using resources efficiently, not exploiting labor, not producing harmful waste, polluting the environment, being environmentally sustainable, preserving the nature, and being fair to all the stakeholders. And truly, CSR is also sometimes referred to as “corporate citizenship” and in line with that one other definition of CSR can be - as defined by the World Business Council for Sustainable Development (in its publication Making Good Business Sense by Lord Holme and Richard Watts) – as follows: “Corporate Social Responsibility is the continuing commitment by business to behave ethically and contribute to economic development while improving the quality of life of the workforce and their families as well as of the local community and society at large.”

Ultimately, however, it is not how you call it or even perceive it exactly, but it is important that you do it. And today, more and more companies are starting to do it, or at least spread the word they do it, and consequently CSR as a way to do business is now immanent in any industry, but is also used increasingly by companies as a tool to achieve competitive advantage. This makes sense not just because consumers are now getting more and more concerned about environment and how any each product is being made, but also as it “can bring benefits in terms of risk management, cost savings, access to capital, customer relationships, human resource management, and innovation capacity.” Actually, it can be argued that CSR today is a must and a norm of doing business, although as I implied earlier not many companies truthfully follows it, many are just “faking it” for the sake of keeping up with the competition. However, and especially, when we talk about food industry - which is now experiencing changes as there is an ever-increasing rise in popularity

13 Baker, M. Mallenbaker.net, Available at: http://www.mallenbaker.net/CSR/definition.php. (17.10.2014.)
of green, natural products in contrast to modified, old-way manufactured products – consumers are very careful about the products they buy and are more inclined to search just how socially responsible a certain company is. That is only logical as after all there are many labels like Fair trade, FSC etc already on the market and consumers are having a hard time to choose which product, company to trust. In response to this shift in consumers’ demands and behavior many companies have already plunged into the direction of manufacturing these green, organic types of products and doing CSR. Specifically SMEs can find this suitable for them to distinguish themselves from other, bigger companies (who more-less sell modified products), to be competitive and establish themselves on the market. For some companies this may well be the niche. Along with the well-thought brand management this may be the path for their success.

Having all that said paper now turns to the case of Croatian company “IGO-MAT” which showcases how this is indeed possible.

5. CASE OF “IGO-MAT”

5.1. Profile of the company

IGO-MAT d.o.o. is a Croatian small-size limited liability company (d.o.o is Croatian equivalent of LLC) whose primary business activity is production and selling of meat and meat products (cured meat products) and whose most widely recognized product is salami “Samoborska salama”. It is a small family company which counts 41 employees started by a local butcher Zdravko Runtas who has been working in meat industry for over 30 years. Of these 41 employees 11 are woman (27.5%), and 16 employees are under 30 years of age. In production employed are 12 people, in marketing and sales 21, in administration 3 and in accounting 3. Firstly the company started as a meat shop that sold on high, as a wholesaler, but then due to emergence of law that there cannot be wholesale from retail they had to open operation and expend. That was in fact a turning point for the company because if they wanted to continue they had to adapt, and so they did.

Today they have production section and 6 own retail shop. Company was established in 1994 and was named after owner’s two son Igor and Matej (IGO-MAT). Igor is working in marketing and sales and Matej is working in production, while their mother works in accounting. Key goal of the company is producing high quality meat products with added value. Its unofficial vision in general is producing and supplying healthy quality cured meat products to wider public including the external, foreign consumers all with a goal of expanding. However, they still don’t have the export number and they are waiting for it to be published and approved by the end of the current year. Still, they produce premium salami for Mercator, Slovenian retail chain operating across Southeast Europe, and their products are often “exported” as souvenirs. Moreover they work also with the biggest retail chains in Croatia such as Konzum, Billa, Metro and Spar for which they are producers of Premium brand under name of Samoborska domaća salama and through which they were able to offer this product (actually “Samoborska salama”) on the area of whole Croatia. Interestingly, there are 70 products under Spar Premium of which only two other producers along IGO-MAT presented itself in front of 40 media.

Exhibit 2. Spar Premium

The company was also the first to introduce the dainty (delicates) products from meat of black Slavonian pork which is indigenous breed of Slavonia region in eastern Croatia. Today they offer all kinds of meat products from bacon and ham (and all types of ham) to pasty and sausage. They offer basically three pallets, assortments of cured meat products: “Samoborska salama” which carries “Samoborska salama” name and which products are made from pork, “Black pallet” which products are made from black pork and “Ginger/Red pallet” which products are made from horse meat but, as already stated, most popular and recognized product is salami “Samoborska salama”. In fact, that was how it all began, with that salami.
5.2. Brand development and management

It was with the project of Zagreb County aimed at the encouraging of production of healthy products produced in a traditional way that everything started. As a result several local brands emerged, its producers all following this route of CSR and traditional, healthy, natural products and focusing a lot on the brand development and management as to distinguish and establish themselves on the market. They were all brands of SMEs, and of these nowadays most established, recognized are cheese “Dragec”, wine “Portugizac Plešivica”, ham “Grof” and of course salami “Samoborska salama”, most well-known and thus best-sold product of company IGO-MAT. For the brand and brand identity of “Samoborska salama” alone to be developed it took 3 years with many researches, presentations and degustations across the whole country but especially in Zagreb County. The aim was to find out potential consumers, their wants and needs regarding the product (salami), how much they are willing to pay for it and of course the aim also was to “spread the word” and make general public aware of the brand.

Lot of researches were done, both in form of questionnaires and focus groups and the emphasis was put on the way of processing meat (chopped/minced), appearance of salami cut, seasoning (normal/sharp), smell, taste, colour, potential buy of samples, propensity of respondents to two size of packaging and opinion on the matter of origin of raw materials used in production of salami. According to respondents, the salami should have been presented (and it was) as natural and domestic product in local village environment and positioned high towards competitors with relation to quality and “manual” production. Associations respondents connected with the brand were: typical traditional, domestic, quality, natural, regional, healthy, hand-made, Croatia, Samobor, fun, snack, friendship etc.

When developing the brand all tangible and intangible elements of brand were taken into account, and focus group research was extensively used and helped in creating the visual identity where again taken into account were the region in which salami was produced, tradition of production, producers and capabilities. Several solutions were dropped until the perfect was found that emphasized, communicated values of traditional, domestic, healthy, natural and regional with designed licitar heart\(^{17}\) with which respondents were especially satisfied.

\textbf{Exhibit 3. Licitar hearts}

![Image of licitar hearts]

Important and interesting to note here is that before that salami was produced only for own purposes. Nowadays the brand has a mark of being original, authentic Croatian product, the souvenir of Samobor, Samobor’s touristic brand and brand of Zagreb County. Samobor is a little satellite town of Zagreb, west of it, famous all over Croatia for its gastronomy, natural surroundings, medieval atmosphere, and for crystal cutting, a local industry with a very old tradition.

\textbf{Exhibit 4. Samoborska salama – etiquette and product}

![Image of Samoborska salama]

\(^{17}\) \textit{Licitar heart} is colourfully decorated cake made of sweet honey dough used for giving as a present in special occasions and it has symbolical meaning and is traditional and cultural heritage of Zagreb and Zagreb County.
Zdravko Runtas’s intention from the start was to produce salami in a different, more traditional, healthy and environmentally friendly way, preserving the nature and tradition while also serving the wishes of consumers. Consequently, their programs and products are little more expensive and their marketing strategy is adapted to all that and to the firm competition on the market.

Exhibit 5. IGO-MAT logo

5.3. Corporate social responsibility

Company perceives CSR as being responsible towards customers, suppliers, surrounding environment and all other people in this world, as company’s owners nicely puts. This means being fair and honest towards consumers and wider community, and this fairness is actually how owner himself would term CSR. In that respect, the company continuously questions and interviews consumers and offers promotional tastings via fares to see their preferences and obviously then follow and respond to their wishes and reactions. Moreover, company shares all financial and other information and that goes in line with the owner’s view that every piece of information is welcoming and is important, regardless if it is only relevant for those working for company or for both internal and external parties.

The basic idea is that the company wants to share and cares much about its consumers and consumer relationship is very important to them. The owner sees the company as another of his children and thus wants to be honest both towards it, himself and towards anyone else, and the image the company aspires to is this image of local “community” eco-friendly and consumer-friendly modern European company. Consequently, they follow, again as mentioned, all the regulations and standards (HACCP included) in the Croatian economy as well beyond that as they have all the conditions met to actually export at the moment across/in the EU, but they are still waiting for the export number.

The company also follows policy of quality and stresses that their business success rests on continual rising of awareness about importance of health probity of food, food safety, on satisfying customers by providing top service and on recognizing and responding current and future customers’ needs. Realization of safe and healthy products is their objective and they are fully aware of their position in food production chain. As quality of their products directly influences their consumers the primary interests are them and their satisfaction and thusly company coordinated its operations with requirements of norm ISO 9001:2000 and recommendation CAC/RCP 1-1969, Rev.4-2003 and commits itself on continuous improvements in system of quality and safety of food. This policy is then revised, re-examined minimally once a year.

Moreover, they demand from their suppliers and other stakeholders (partners etc.) that they follow the same procedures, regulations and standards and demand they deliver the subsequent certificates evidencing that. They even send, from time to time, their own audits to see if their suppliers really conform to these procedures and regulations and to see how and under which conditions they operate.

As a natural consequence, and as it should be, company knows the path of its product from the beginning to the end, meaning they know history from where, when, at what exact time and place the meat was obtained, how it was stored, then processed further and so on all the way to the final of product, whether that being salami, ham or else. In other words, from the line of slaughter to the line of consumer and they can track this by article or group, and, of course, this data is then also displayed on the final products in the shop. So a consumer can, if willing, track and find out all about how the meat product was obtained and how it was processed. This brings value both to the consumer and to the company as it builds trust, making the consumer assured and confident to return.
Exhibit 6. Igor Runtas showing label indicating the path of the meat

Again the company has under contracts with their suppliers and other stakeholders that this is all done that way. Additionally, in support to the statement that they really do care about environment, they don’t produce waste that would be harmful for human health or the environment, while the waste they do have, such as cardboard and nylon packaging, they sort and dispose of in adequate containers. They don’t use any unauthorized, harmful medium and they don’t release anything harmful into the air and into the system, that is environment, while wastewater they produce as a result of production goes through bioreactor, biological purifier, that cleanse it so clean water goes on. Even further they conduct analysis every four years to actually investigate the impact of their operations on the environment.

The company obviously has also its own regulations regarding the safety of workers and how they should be dressed and equipped and how they should behave on the job and there are severe punishments if workers are not following these regulations. In short, company exercises strict self-control but also makes contracts and plans on issues of socially responsible business practices with its partners, associates.

The reason why the company goes to this great length to be socially responsible in such a way is not just the law, regulations and standards they have to follow nor is it the matter of being in line or even better than the competition, the reason is that they consider this as normality. It is in owner’s, Zdravko Runtas’s words all about fairness, being fair to one own self and to everyone else, it is in having a social awareness that basically everyone should consider when doing business and should be (socially aware) in general.

This (efficient and thorough implementation of CSR) is something that distinguishes them from others and helps them succeed on the market. As evidence to that, they were able through CSR strike partnership with international retail chain Spar which enabled them to expend offer of its most popular product “Samoborska salama” to the whole of Republic of Croatia under the label Spar Premium. It also certainly helped them strike partnerships with other chains as well, like Metro, Mercator and Billa, and will certainly help them again in the future when they enter foreign markets (which sadly yet they cannot as they are waiting for export number from the local authorities and EU).

In conclusion, the company obviously realizes that CSR is a condition for further expanding and for being in line with the image they aspire to so much which is the image of modern European company. Moreover, the company knows that this is its strength along with producing green, natural products and its well-thought and sound brand management and this is true considering its success on the Croatian market and great reputation it enjoys. To support that, the company’s profit for the operating year 2013 was 21.4 million Kuna which would be 2,809,440.51 € and investment in the company was 17 million Kuna which equals 2,231,798.53 €. Considering the economic crisis Croatia is currently in and the fact that company is still quite young and has only 41 employees it is doing extremely well.
6. CONCLUSION

The purpose of this paper was to show how well-thought brand management and efficient implementation of CSR can allow company to achieve success on the market and be competitive as shown on the case of Croatian SMEs presented by the company “IGO-MAT”. The paper explained, in brief, what brands and brand management are and their importance and also it elaborated what is CSR and why it is important before further continuing on the issue of “IGO-MAT”.

Brand today is the most important asset of the company and value that it derives exceeds other values of a company. It brings a promise of performance, experience, identity and emotional relation/connection with a consumer and on the fulfillment of this promise rests the prospect of the company’s success. Also it is the most important tool in marketing, representing the identity itself. Its power lies in the image it calls up in the minds of the consumers.

Brand management is responsible for this image and strength of the brand, in short its success. However, brand management is not a onetime work but rather it is a continual process constantly thought of and worked on. Generally, it is necessary that brand be managed in such a way that its meaning is relevant to consumers in that it satisfies their needs and wants and that it stands out. In a nutshell, brands and brand management are important as they create value both for consumers and the company in many different ways.

CSR is a relatively recent phenomenon, trend in business gaining in popularity and importance as more and more companies are increasingly follow it, using it as a tool to achieve competitive advantage. Besides competitive advantage it brings a lot of other advantages as well, and for SMEs this can well be the path to success, allowing them to, all else aside, reduce costs and increase efficiency.

“IGO-MAT” is a small family owned company with 41 employees that offer all kinds of meat products but are most widely known (in Croatia) as a producer of salami “Samoborska salama”. This is their main product and from where everything started. The brand of “Samoborska salama” was being developed carefully and thoughtfully for 3 years until it was introduced to the market and now the brand has a mark of being original, authentic Croatian product, the souvenir of Samobor, Samobor’s touristic brand and brand of Zagreb County. For that success sound brand development and management is accountable.

In addition, what also helped company to achieve success and great reputation it enjoys today is its efficient and thorough implementation of CSR, apparent in everything they do, from procurement, production and storage down to treatment of its waste. This is something that distinguishes it from other companies, its competitive advantage and its strength.

To conclude, “IGO-MAT” is a good example how a SME can use brand management and CSR to establish itself and succeed on the market. This need not just hold for Croatian SMEs but any other national SME can in fact use its example as guideline(s) to success.

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ABSTRACT
Although the Internet was originally developed for governmental and educational purposes, its marketing potential was observed at the outset, and today Internet has become one of the most significant and the greatest marketing tools for the global market in this revolutionary period. Role of Internet as marketing tool is growing every day, thus changing the direction of marketing, especially communication because it facilitates companies to identify and reach potential customers much easier and more accurate. Also, advances in information technology, provide companies new opportunities to communicate with their customers, and also to better understand their customer preferences. Today, in a time of crisis, every company knows how important it is for them to communicate with their customers through various Internet tools. One of the most important Internet tool to communicate with customers are companies’ websites, and the reasons for this may be low cost and communication with customers who are always active and online. The aim of this paper is to find out how often and in what way leading companies on the Croatian market communicate with customers through their website. This paper provides theoretical review of the websites as communication tool. It offers a big picture view of the current state of using websites by leading companies on Croatian market. Paper and shown results can be beneficial for marketing experts, as well as for companies and their customers.

KEY WORDS: communication, customer, Internet, websites, leading companies.

1. INTRODUCTION
Nowadays if company wants to survive they need to improve effectiveness of both marketing and communication strategies. With the development of technology, the role of the Internet in marketing activities has increased as well as its impact on the behaviour of customers and companies. To achieve success in this new age, the age of the Internet, marketers must revise their strategies and adapt the way of doing business to the modern environment not only to survive. New Internet marketing strategies include new ways of targeting, focusing on benefits, product strategy emphasising authenticity, promotion based on well-managed websites and so on. By using such marketing strategies, companies can go beyond “one-to-one” and develop “many-to-many” communication (Lagrosen, 2005).

With the advent of the Internet, many marketing communication researchers realised that this new medium would bring new opportunities for the marketing communication process. There are different ways of communicating with different groups/segments of customers via Internet and it is important to know the communication media to which each group responds (Ashcroft and Hoey, 2001). Internet as a marketing medium is becoming increasingly prevalent in modern companies and one of the reasons is the large number of users to whom company can sent messages and who can be quickly and easily reached. For this reason, new strategies have been designed to help companies adapt to demands of modern customers.

Online communication tools such as companies’ websites are used to cope in the current dynamic environment because they make it possible to meet across geographic and cultural boundaries (Pauleen and Yoong, 2001) and potentially reach international audience. The reasons for the growing use of Internet and websites as its tool are the benefits that it provides for companies, such as two-way communication between companies and customers that enables the effective identification of customers’ needs that companies can build and maintain long-term relationships with their customers, managing relationships with them.

There are very little published information about the content, quality or impact of communication between companies and customers through websites in Croatia. This paper will try to analyse and find empirical evidence how leading companies on Croatian market communicate with their customers via its websites.
2. INTERNET COMMUNICATION

Digital technology, especially the Internet, is the key to major technological changes in the media image of the 21st century. The development of the Internet has brought dramatic changes not only in how individuals communicate every day, but also in how companies communicate and conduct their businesses. The Internet was seen as an opportunity for companies to contact their customers and to interact with them. Technology development makes creation of content incredibly easy and virtually free, both for customers and companies (Paine, 2007). The World Wide Web has revolutionized relations between companies and their public (Ashcroft and Hoey, 2001) and it is considered to be the first mass medium allowing direct communications between organizations and their public. Through the web marketers can communicate directly with their public with transparency, frankness and democracy (Kirat, 2007).

Interactive media, particularly the Internet, allow an easy flow of information, because of which users can participate in, and modify the form and content of the information they receive in real time. Traditional media are a one-way medium, as companies are not aware of the response to it. On the other hand, the new media allow users to perform a variety of functions (receive information, make inquiries, respond to questions and make purchases) (Belch and Belch, 2003). And what is very important, traditional media need to adapt to demands of new audiences. “The Internet has broken the barriers of classical communication models as each recipient is a sender too.” (Scarlat and Maxim, 2009) Instead of passive customers, new types of users appear active creators of forms and content of new media (Mučalo and Šop, 2008).

Today, in the competitive environment companies have to communicate with their audiences or their public (customers, investors, employees) in order to survive and develop as entities. The modern communication techniques permit reaching more and more public faster than before and allow increasing the freedom of action for the public. They offer new ways of transmitting the message, more efficient way to reach the public and more sophisticated ways to convince it but they also bring unexpected challenges (Scarlat and Maxim, 2009). So, marketers are seeking for much more than just a one-time exchange or transaction with customers. Similar to marketers, companies have started to pay more attention to understanding customers and their behaviour and also to develop and sustain long-term relationships with their customers. They have realized that by using the right information about their customers, they can gain a competitive advantage in their business surroundings. Companies can use the Internet to structure their information to respond instantly to expanding issues and market developments and changes (Kirat, 2007). It is all about creativity, imagination and ability of sender of messages to offer people a good reason to change beliefs about the company, product or service.

Internet communication now is affected by a tremendous speed of development and it is not enough „just to be there“, companies need to define its objectives and strategies not to develop their website, or pages on social networks in a standard or in a „me too“ format. Companies need to be present and interactive. Therefore the situation should change from active customer - passive company to active customer-active company in which both sides are looking for long-term relationships (Vescovi, 2000). It is very important to mention that the number of Internet users has grown at an enormous pace. It is estimated that in December 2013, there were 2.8 billion Internet users around the world, which represent a growth of 676.3% since 2000. In Europe, the number of Internet users has increased, growing from 105.1 million in December 2000 to 566.3 million in December 2013 (growth of 438.8%) with the 68.6% penetration rate of Internet users (Internet World Stats, 2014a). Among the European countries, penetration rate of Internet users in Croatia is 70.9% (3.2 million Internet users) (Internet World Stats, 2014b). According to these facts, companies have a larger market to communicate with.

3. COMMUNICATION THROUGH COMPANIES WEBSITES

The development of information and communications technologies and the development of new marketing channels have led to the changes in communicating with customers. Nowadays virtual space reveal the growing importance of the communication and the relationship with the customer and it forces companies to search for the most efficient tools and innovative ways of communication on the Internet.

Online channels represent new sophisticated direct marketing media, and nowadays the most commonly used form and the most effective Internet tool for companies to reach their customers and communicate with them is their official website. Companies’ websites have been used since the beginning of Internet development in its early stages and as the virtual space has been changing over time in quality, quantity and capabilities, so have its companies’ websites as well. It should be noted that the number of sites increased from 23.000 in 1995 to more than 644 million websites in 2012 (Pomirleanu et al., 2013).

A website is an information resource on the web and many companies have made great efforts to utilize the Internet to expand their businesses (Rahimnia and Hassanzadeh, 2013), so companies’ websites become one of the most important issues for companies that want to communicate with their customers, promote their products and services, maximize profits, to reach competitive advantage, or introduce themselves in the best way. That is the reason why companies today use their websites as windows through which public will see them. A website offers companies not only a platform
to promote products or services but also another avenue to generate revenue by attracting more customers (Chiou et al., 2010) and what is important a platform or instrument to communicate with their existing and future customers and for relationship marketing activities.

Having a website is the basic requirement if companies want to provide Internet marketing and communicate with customers by using online channels. Websites and their tools facilitate interaction between companies and customers and in recent years companies integrate new technologies and tools into their websites, transforming their statistic and passive content into dynamic and interactive content (Escobar-Rodriguez and Carvajal-Trujillo, 2013).

Internet is today an indispensable medium of distribution of information (Slivar and Križman Pavlović, 2012) that provides customers with an unprecedented opportunity to access information and to communicate with companies whose product they buy or services use. However, there has been considerable concern that the quality of information on the Internet is variable and that customers may be accessing sites containing inaccurate, incomplete or biased information (Griffiths et al., 2002) so for companies is very important to have as much ways to communicate with their customer as is possible so they can prevent problems that may appear. Some of the ways are: e-mail communication, free Customer Support Phone Numbers, official page on the social networks, corporate forum or blog and so on.

4. RESEARCH

In order to research communication through companies’ websites, 400 leading companies in Croatia were taken into consideration. The main aim of this research, quantitative exploratory study by websites observation of leading companies on Croatian market, was to discover whether these companies use their websites to communicate with their customers. Other objectives were to determine whether the leading companies on Croatian market have a website intended for Croatian market (in Croatian), is there an email address intended for customers, do they have a prominent free Customer Support Phone Numbers, do they have an official page on the social networks such as Facebook and Twitter (given that they are, according to numerous research, the most commonly used social networks for communication between companies and customers), and whether the leading companies on the Croatian market have highlighted Corporate forum on their official websites or any other form of free contact that customers could use to communicate with them. Finally, additional research was conducted on a mobile device to verify do leading companies on the Croatian market have mobile web. The data was taken on April 2014. Nevertheless, during the development of this paper, changes in data have occasionally been monitored and it was concluded by the authors how trends in numbers were such that the taken data was qualitative enough to be used for the research.

The empirical research covered websites observation of 400 leading companies on Croatian market. The finding show that 368 (92%) of companies have an official website designed for Croatian market (in Croatian), other companies have a website in English (26 companies) or their website is under construction (6 companies). Further, 394 (98.5%) of 400 companies have highlighted an email address intended for customers, regardless of e-mail in form of contact centre or long-term communication with customers. Research showed that 270 (67.5%) leading companies on the Croatian market have free Customer Support Phone Number. Also, only 42 leading companies on Croatian market (ie, 10.5%) have corporate forum. 213 companies highlighted on their website that they have an official Facebook page profile (53.3%). If we observe these 213 companies, the average number of „fans“ is 10,156. Further, 66 leading companies on Croatian market have an official Twitter profile (ie 16.5% of them), and the average number of “followers” is 320. At the end, 115 companies of 400 (or 28.8%) of leading companies on Croatian market) have mobile web.

If the companies that have an official website designed for the Croatian market, companies that have an e-mail address, Customer Support Phone Number, corporate forum, an official Facebook and Twitter profiles, as well as having the mobile web are analyzed in terms of activities from which they come, it is noticeable that those are mostly companies from the telecommunications, automotive and food industries, as well as in the field of media, commerce and tourism.

5. CONCLUSION

The paper shown represents the theoretical basis, as well as part of the research connected to communication with customers of leading companies on Croatian market through their official website. The need for such research was found in facts that today’s communication is partially moving to web spaces and the fact that companies’ websites are extremely important for communication between company and its customers. Results shown in this paper represent just the first step in the analyses (as a part of the research for the doctoral thesis “New direct marketing approaches as a factor of customer satisfactionion and loyalty”) and it will be used for further research in order to examine the ways of communication of leading companies on Croatian market goes.
LITERATURE


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CENTRAL AND SOUTHEAST EUROPEAN POST-COMMUNIST EU MEMBERS: HOW USEFUL WAS IT TO BECOME A MEMBER OF THE EUROPEAN UNION

PETAR KUREČIĆ
GORAN KOZINA
ANICA HUNJET

ABSTRACT

After the breakup of communism and multinational communist federations, the countries of Central and Southeastern Europe have taken somewhat different paths in their socio-economic development. All of the countries opted for the market economy and reforms, and most of them decided to join the process of European integration. However, some were more and some were less successful. Since 2004, the European Union has expanded three times, accepting 13 more countries into its membership. Out of these, 11 were post-communist countries from Central and Southeastern Europe, which had to overcome the difficulties of political and economic transition, fulfilling many demands put before them by the European Commission. The aim of this paper is to study the 11 post-communist EU members by examining their basic economic data, and to see if European integration (prior and after the accession) has benefited their economies. The second group of countries examined here are the non-EU members that presently form the Western Balkans, in order to compare their economic performance with the post-communist EU members. The differences between the 11 post-communist EU members were also studied in order to determine whether the geographic position and the year of the EU accession (2004, 2007 or 2013) were the factors that influenced their economic performance. The results have shown that despite significant differences among the post-communist members of the EU, they have all benefited from the process of the EU integration.

KEYWORDS: Central and Southeastern Europe, the Western Balkans, the European Union, economic growth, gross-domestic product (GDP), economic crisis.

1. INTRODUCTION

Since 2004, the European Union has expanded three times, accepting 13 countries into its membership\(^1\). Out of these, 11 were post-communist countries, from Central and Southeastern Europe, which had to overcome the difficulties of political and economic transition, fulfilling many demands put before them by the European Commission. The process of accession was shorter for some countries, and for some others it lasted longer. In general, if we consider only the new (since 2004) members of the European Union (henceforth referred to as the EU) from Central and Southeastern Europe and the duration of their accession negotiations, we can see that the negotiations were the longest for Croatia, which joined in 2013. For Bulgaria and Romania, which joined in 2007, the negotiations were longer than for the countries that joined in 2004. Two factors caused the protracted length of these negotiations: first, the demands from the EU and second, the preparedness of the candidate countries to fulfill these demands. The countries that benefited the most from the EU accession are the Visegrad group comprising Poland, the Czech Republic, Slovakia, and Hungary (henceforth referred to as V4). During 10 years of EU membership, the V4 have experienced strong income convergence. The GDP per capita of the V4 measured in purchasing power standards has increased from 49% of that of the EU15 in 2003 to 65% in 2013. Three out of four Visegrad group countries (Slovakia, Poland, and the Czech Republic) improved their rankings in terms of quality of life, with the Czech Republic actually surpassing Italy and the UK. The economic strength of the V4 relative to the EU28 as measured by GDP has increased by one-half over the last decade to 5.4% of that of the EU28. The economic relevance of the V4 has become most visible in foreign trade. The share of V4 exports relative to those of the EU28 has increased to 9.1%, from 5.8% a decade ago. Old EU member countries also benefited from the EU enlargement. With a population of 64 million, the V4 offers a similar size consumer market in terms of the number of consumers to France or Italy and, in terms of the value of consumer spending, to the Benelux countries (EUR 230 billion). Exports from old EU members to the V4 have skyrocketed, growing twice as fast as their total exports (Jedlička, Kotian, Műnz, 2014: 1-2).

\(^1\) On 31 March 1998, accession negotiations were started with six applicant countries - Hungary, Poland, Estonia, the Czech Republic, Slovenia and Cyprus. On 13 October 1999, the Commission recommended Member States to open negotiations with Romania, the Slovak Republic, Latvia, Lithuania, Bulgaria and Malta. Negotiations were concluded with Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, the Slovak Republic and Slovenia in December 2002. According to: http://ec.europa.eu/enlargement/archives/enlargement_process/future_prospects/negotiations/eu10_bulgaria_romania/index_en.htm. Negotiations with Bulgaria and Romania lasted longer and these countries became members at the beginning of 2007. Croatia had to undergo the most demanding negotiations and to solve the issues with the Hague Tribunal as well as with Slovenia, which blocked the negotiations of Croatia with the EU because of bilateral issues.
The second group of new EU member states that benefited the most from the accession to the EU were the Baltic states. Grigas et al. (2013) have shown the sources of the remarkable economic growth and the economic recovery of the Baltic states. After gaining independence, the Baltic states chose to distance themselves from Russian influence and direct their policies westwards, largely following the liberal prescriptions of the Washington consensus to become open market economies. During the first half of 2000s, the Baltic states lived through their golden age of GDP growth, which was nevertheless coupled with a build-up of significant macroeconomic imbalances\(^3\). The economies were growing at the spectacular pace of 8-9% per year on average in real terms, and the levels of national real wealth more than doubled in the period of 2000-2008. Consequently, in 2008-2009, the three Baltic states experienced double-digit recessions, which in terms of output loss could have only been compared to the downturn caused by the collapse of the Soviet Union. There were two ways out of the crisis: external (currency) or internal devaluation (and thus harsh austerity), out of which the second policy option was chosen in all three Baltic states. The way the Baltic states dealt with the crisis and the near-miraculous current economic recovery invites the austerity-supporters to proclaim the countries as an example, in particular for the Southern EMU member states caught in protracted recessions (Grigas et al., 2013: 11, 35).

The aim of this paper is to consider the basic economic data (GDP, GDP per capita, GDP annual growth rate, unemployment) for two studied groups of European countries. The first one consists of the 11 post-communist members of the EU (Bulgaria, Croatia, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, the Slovak Republic and Slovenia) and the second one comprises six Western Balkans states (Albania, Bosnia-Herzegovina, Kosovo, Macedonia, Montenegro, Serbia). The Western Balkans states, all post-communist as well, were not the primary object of research. However, all of the data shown for the 11 post-communist members of the EU are presented for them as well, to see the differences between the post-communist EU members and the post-communist non-EU members that have some prospect of becoming members of the EU in the future.

2. METHODOLOGY

The data about the population (2012), and basic economic data selected for the purpose of this paper\(^3\): GDP (current US$, 2012), and GDP per capita (current US$, 2000, 2004-2012), GDP growth rate (annual %, 2000, 2004-2012), unemployment (% of total labor force, modeled ILO estimate, 2000, 2004-2012), and the exports of goods and services as % of GDP (2000, 2004-2012) were taken from the web pages of the World Bank and shown through graphs for the 11 post-communist members of the EU. These data were used to study the current situation and the economic performance of the two groups of countries under consideration. By comparing the basic economic data of the 11 post-communist members of the EU and the Western Balkan states, we have analyzed the basic economic characteristics as well as economic performance of these two different groups of countries.

By studying the economic data, we tried to respond to the main research question:

*Is it useful for a post-communist country from Central and Southeastern Europe to become a member of the EU, when it comes to economic performance?*

We have also tried to respond to the additional research questions:

- If the post-communist EU member states have profited from the accession to the EU, have the countries that joined in 2004 profited more from the accession than the countries that joined in 2007, and especially more than Croatia, that joined only in 2013?

- Are there significant differences in the economic performance over a certain period (2000-2013), between the 11 post-communist members of the EU and the Western Balkan states?

The main hypothesis (H1) of the research was as follows: *when it comes to economic performance, it is useful for a post-communist state from Central and Southeastern Europe to become a member of the EU.*

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\(^3\) The causes of rising imbalances were several. Firstly, the financial sector was completely liberalized and almost entirely overtaken by the Nordic banks in all three countries, which fuelled capital inflows and credit expansion. In Latvia, more than 60% and in Lithuania and Estonia more than 90% of the financial sector became foreign-owned. Private sector debt more than tripled in all three countries in the period 2000-2008. The great majority of loans were invested in real estate, which subsequently led to a housing bubble. Rainer, K. (2010), Financial and Economic Crisis in Eastern Europe, *Journal of Post-Keynesian Economics*, 33 (1) 46. In: Grigas et. al. (2013): 37.

\(^3\) The economic data were taken from the web pages of the World Bank. Although the data about the population was available for all countries for 2013, and the basic economic data was available for some countries for 2013, the year 2012 was taken as the last reference year, since the economic parameters shown (except exports of goods and services) for that year were available for all the countries studied. We also wanted to avoid using other sources, because we wanted to compare the data for each year from a single source, calculated by the same methodology.
The additional hypotheses (H2 and H3) of the research were the following:

- The post-communist countries (now 10 post-communist EU members) that applied for EU membership in the 1994-1996 period (and opened accession negotiations in 1998 and 1999) performed better economically in the period from 2000 to 2013 than Croatia, which applied in February 2003 and opened the negotiations in October 2005.
- There are significant differences in the level of ability to benefit from the membership in the EU among the post-communist EU members.

3. RESULTS AND DISCUSSION

The 11 post-communist members of the European Union in 2012 had a population of about 105.1 million. More than 55% percent of the people in these 11 countries lived in only two countries: Poland and Romania.

<table>
<thead>
<tr>
<th>State</th>
<th>GDP in billions (current US$)</th>
<th>GDP per capita (current US$)</th>
<th>GDP growth rate in %</th>
<th>Unemployment in %</th>
<th>Exports of goods and services as % of GDP (2011)</th>
</tr>
</thead>
<tbody>
<tr>
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<td>7 022</td>
<td>0.6</td>
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<td>2.7</td>
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<td>The Western Balkan states</td>
<td>87.3</td>
<td>4 770</td>
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Table 1. The basic economic data for the 11 post-communist EU member states and the Western Balkan states (2012)
Figure 1. GDP of the 11 post-communist EU members in billions of current US$ (2012)

Figure 2. GDP of the Western Balkan countries in billions of current US$ (2012)
Table 2. GDP of the post-communist EU members and the Western Balkan countries, indexes (2000=100)

<table>
<thead>
<tr>
<th>State</th>
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<th>2008</th>
<th>2009</th>
<th>2012</th>
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<td>340.4</td>
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</tr>
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* The baseline year for Serbia was 2001, since in 2000, the Serbian economy was almost ruined due to the NATO attacks and sanctions. In 1999, the GDP of Serbia was 17.6 billion, in 2000 it was only 6.1 billion, and in 2001 it was 11.4 billion (current US$).

In Table 2, the GDP of the post-communist EU members and the Western Balkan countries is shown through indexes. The year 2000 was taken as a baseline year, except for Serbia. The years shown are 2004 (the year of accession to the EU for most of the post-communist EU members, eight of them), 2007 (the year of accession for Bulgaria and Romania), 2008 (the year of the highest GDP), 2009 (the year of recession and steep decrease in GDP) and 2012 (the last year for which data are available for all countries that have been studied). While the differences between the two groups of countries according to the presented indexes are not so significant, the gap in GDP per capita (current US$) between them remains very big, about 263% (12 539 US$ for the post-communist EU members, and 4 770 US$ for the Western Balkan countries, as shown in Table 1). The GDP of the Western Balkan countries also rose remarkably in the studied period (2000-2012), but the data that show GDP per capita of these countries show a very low level of GDP in the baseline year (2000), due to the consequences of the wars in the Balkans and the extreme difficulties in the post-war period. The real economic transition in the Western Balkans started much later than in the Central European countries (including the Baltic states).
Figure 3. GDP per capita (current US$) of the 11 post-communist EU members and the Western Balkan states, 2012

Figure 3 shows GDP per capita (current US$) of the post-communist EU members and the Western Balkan countries for the years 2000, and 2004-2012. The differences in GDP per capita between the countries from the two groups are very significant. Bulgaria, a state with the lowest GDP per capita (7,022 US$) among the post-communist EU members has a higher GDP per capita than Montenegro (6,514 US$), which has the highest GDP per capita among the Western Balkans countries. None of the Western Balkan countries in 2012 even came close to achieving the GDP per capita of Slovenia in 2000 (10,045 US$, shown in Table 3).


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* The baseline year for Serbia was 2001, since in 2000 the Serbian economy was almost ruined due to the NATO attacks and sanctions. However, not until 2003 did Serbia manage to surpass its GDP per capita from 1999.
Table 3 shows the difference in GDP per capita for all the studied countries in 1990, 2000, and 2012 through indexes. Although the data for 1990 were not available for all countries, we decided to use the available data to show the difference between the socialist period and the transition period. We also decided to use the data for the year 2000, since it shows a situation approximately a decade after the beginning of transition. The data for the year 2012 were used, as in all other figures and tables in this paper, since it was the last year in which the data for all countries studied were available. When we compared the data for 2000 and 2012, it was clear that all the 17 countries from the major groups of countries under consideration (i.e. the current 11 post-communist EU members and 6 current Western Balkan states) managed to increase their GDP per capita. However, that was the only common feature of all the countries, since the results for countries (for which the data from all years studied were available) showed very large differences in GDP per capita when the results for 1990, 2000, and 2012 were compared.

The only three countries that had smaller GDP per capita in 2000 than in 1990 were Bulgaria, Croatia, and Macedonia. Romania in 2000 barely surpassed the GDP per capita from 1990 (the year that followed the Romanian revolution and the first free elections), although Romania’s GDP per capita in 2000 was still extremely low for a European country.

**Figure 6.** GDP annual growth rate (in %) of the 11 post-communist members of the EU (2000, 2004-2012)

**Figure 7.** GDP annual growth rate (in %) of the Western Balkan states (2000, 2004-2012)
By taking into account the level of GDP per capita for the years 1990, 2000, and 2012, as well as taking into account other basic economic indicators for the years 2000-2012 (unemployment, GDP annual growth rate), we have classified the 17 countries into subgroups. These subgroups provide a better understanding of the specific characteristics of the countries studied, concerning the path of the social and economic development through which they have passed.

The subgroups of the post-communist EU member states are the following:

- Central European countries of the Visegrad group and the Baltic states. These seven countries (Estonia, the Czech Republic, Hungary, Latvia, Lithuania, Poland, Slovakia) have managed, after the initial difficulties at the beginning of the 1990s, to achieve a decade and a half of continuous growth (until 2009 and the recession). In this period of economic growth, the GDP per capita of Visegrad group countries and the Baltic states multiplied between approximately 4.8 (Hungary) and 8.2 times (Slovakia and Poland), which is clearly visible from the data about their GDP per capita for 2008 and 1990. However, until 2000, among these countries, only Poland and Slovakia managed to double their GDP per capita (their starting point in 1990 was also the lowest among these countries). The Baltic states man-

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The data for Kosovo were not available.
aged to accelerate their growth only after 2000, when it was already likely that they would join the EU (and NATO, which, in the case of the Baltic countries, might have been even more important, as NATO was perceived as the only reliable and relevant guarantor of their security because of their past and complicated relations with Russia). From 2000 to 2008, in a period of continuous growth, the Baltic states succeeded in rising their GDP per capita between four and five times, and the countries of the Visegrad group between three and four times.

- The economic impact of the EU accession on post-communist countries that accessed the EU in 2004 (Visegrad Four, the Baltic states, and Slovenia) was studied after five years of their EU membership by Čihak and Fonteyne (2009). The results of this study showed that most new member states (NMS, name given here only to the post-communist countries that joined the EU in 2004) were benefiting from a structural transformation. A comparison of the GDP growth rates in individual NMS countries (text chart) shows relatively high growth rates in the NMS, both in the run-up to accession and in the years since (with only Estonia and Hungary showing a slowdown in 2004–08 relative to 2000–03) (Čihak, Fonteyne, 2009: 8). Growth in the NMS (and elsewhere in the emerging Europe) was driven primarily by total factor productivity (TFP). Moreover, countries with higher TFP growth were growing faster and the list of EU countries with the highest technological growth coincides perfectly with the NMS list. Capital accumulation was also important in most countries. Labor, in contrast, added less and even registered a negative contribution in some countries, with emigration being a key factor. The analysis also indicates that there were substantial differences among individual NMS countries, with average annual TFP growth rates in a wide range, from 2 percent to 6 percent. Such variation goes beyond the differences among previous EU entrants (where the variation of average TFP growth rate was roughly from 0.6 percent to 2.9 percent) (Čihak, Fonteyne, 2009: 16).

- Bulgaria and Romania in 2000 had a GDP per capita that was a little higher than the average for today’s Western Balkans states. Compared to 1990, until 2000 Bulgaria suffered a decrease in GDP per capita, which is a clear indicator that it was struggling with the difficulties connected with economic transition. Until late 2000, Bulgarian GDP per capita plummeted to only two thirds of the 1990 level. Romania had the same level of GDP per capita in 2000 as in 1990. Clearly, Romania was economically more successful in the 1990s than Bulgaria, but the real economic growth was still beyond reach. Only after the start of negotiations with the EU, Bulgaria and Romania showed a more significant economic growth. However, their negotiations were more difficult and unlike other ten candidate countries, they did not manage to finish them by the end of 2002. Therefore, Bulgaria and Romania joined the EU at the beginning of 2007, and not in 2004. Until 2008, they managed to increase their GDP per capita 4.4 times (Bulgaria) and six times (Romania) respectively. Due to the very low GDP per capita in 1990, these countries were still the least developed countries of the whole EU27, and they are still the least developed EU members after Croatia joined in 2013. One of the reasons that supports the current situation is the fact that Bulgarian economy produces goods with low added value. Similarly, the Romanian economy mainly produces goods with low added value. The price of labor in Romania and Bulgaria is the lowest in the EU. Therefore, many production plants from labor intensive, low value added industries have migrated there.

- The Western Balkan states – these countries (except Albania) were a part of former Yugoslavia. Since the GDP per capita data for 1990 were not available from the same source for all these countries, in explaining similarities and differences between all of them we have focused on the period from 2000 to 2012. Albania had an extremely low GDP per capita in 1990, but then it was still a communist state, and completely isolated from the world. In 2000, 3

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1 Nevertheless, this time frame of five years covers two very distinct sub-periods: one of historically strong global growth (2004–07) and the onset of an at least equally historic financial crisis (2007–09) that undoubtedly represents the greatest economic test the region has faced since EU accession (Čihak, Fonteyne: 3).

2 The research of Bulgaria’s export competitiveness in the framework of EU accession for the period 2002-2009 shows evidence of low export performance in terms of diversification, factor intensity and technological sophistication and significant lagging behind countries like Hungary, Slovakia, and, in certain fields, Romania. It is mostly attributed to low-grade sector specialization. The integration within the EU so far has not accelerated technological catch-up. For instance, recent evidence indicates unexpected export growth in traditional industries as Bulgaria overwhelmingly remains steadily anchored in the low value-added competition on international markets. Apparently, Bulgaria has not managed to get full advantage of its EU integration to promote its export competitiveness. Its trade has been strongly misbalanced for a long period. Despite the steady increase in the value of exports before the global economic crisis occurred, the imports were exceeding, thus leading to a chronic trade deficit, a meaningful sign of dependence on external factors (Čihak, Fonteyne, 2009: 16).

3 The main engine of growth up until 2008. Household investments in both durable goods and housing rose fast after 2003, as the share of these in household totals wealth was low. The increase in demand for durable goods and housing was facilitated by increased credit availability and rising purchasing power. The boom continued until the autumn of 2008, when the effects of the global economic downturn, triggered by the 2007 US subprime crisis, impacted negatively on Romania’s economic growth. Large existing macroeconomic imbalances were penalized by investors as global liquidity dried up and uncertainty rose sharply in the world financial markets. GDP growth was much faster in the four years leading to accession, averaging 6.4% annually, than during the membership period, when it rose by a yearly average of just 1.2%. While the latest result is clearly influenced by the effects of the crisis, it also highlights the diminished capacity of the Romanian economy to absorb external shocks.

the GDP of the Western Balkan states was very low, compared to most of the other European countries. Croatia, which was then also a part of the Western Balkans, was officially put there (the Western Balkans was a designation given by the EU to the countries of former Yugoslavia minus Slovenia plus Albania) for political rather than economic reasons\(^6\).

Slovenia and Croatia, because of their specific development, could not be classified in any of the groups. In 1990, before the breakup of Yugoslavia, Slovenian economy was much more developed than in any of the other countries studied. If Slovenia had been an independent state then, it would have had a GDP per capita higher than Portugal\(^5\), which was already an EU member state. Due to the partial or complete loss of important traditional markets (the countries of former Yugoslavia, and the former U.S.S.R.), Slovenia did not manage to achieve such a large growth of GDP per capita as countries of the Visegrad group until 2000. However, its growth of GDP per capita from 1990 to 2000 was approximately the same as that of Latvia and Lithuania. What was not the same was the level of GDP per capita since Slovenia’s was over three times higher. From 2000 to 2008, Slovenia has managed to increase its GDP per capita almost 2.7 times, which is a remarkable achievement for a state that was by far the most developed of all the countries in transition.

In 1990, Croatia was, according to the data available, the second most developed state of all the countries studied. The Homeland War and the difficulties in its aftermath, the loss of traditional markets, and a very badly managed transition (especially privatization of state-owned property) caused the Croatian GDP per capita to decrease significantly in the 1990s. In 1999, Croatia suffered a recession, as the only European state that was affected by this economic phenomenon, so common in Europe after 2008. In 2000, GDP per capita still did not reach its 1990 level. Nevertheless, from 2000 to 2008, Croatia succeeded in raising its GDP per capita 3.2 times. Since 2009, Croatia has suffered the longest period of recession of all EU member states (except Greece), and its GDP has fallen over 13 percent. It is still struggling with negative GDP growth, which has turned into an economic depression.

4. CONCLUSION

The member states of the EU that joined the EU in 2004 and 2007 have profited economically from the accession. They have better economic data than the post-communist European countries that stayed out of the EU, such as Western Balkan states. This fact is not surprising considering their different social and economic development in almost two and a half decades, and a different starting position that each state had in 1990. Although each state had its own distinctive recent history, as well as social and economic features, it is also possible to identify certain common features for some of the countries studied and therefore classify them in certain subgroups. Based on our research, we have recognized that among the countries studied, the shifts occurred, considering their belonging to a certain group, because of the different paths of economic development since the beginning of the economic transition, which actually did not start in all the countries at the same time, due to different historical circumstances.

The results of our research support the thesis of Jedlička, Kotian and Műnz (2014). The Visegrad group states indeed are the great benefactors of the EU enlargement. These countries are economically stronger and more relevant 10 years after EU accession. Their annual average GDP growth has increased by approximately 1% due to EU membership. Visegrad group exports have grown three times faster than EU15 exports; the Visegrad group is now the fourth largest exporter in the EU28. However, from the results of our research, we can conclude that the Baltic states have also benefited significantly from EU membership. Nevertheless, their significant economic growth started later than in the Visegrad group countries. Their economic downfall of 2009 was also much sharper and more intensive than in the Visegrad group countries\(^11\). However, the economic recovery of the Baltic states has since then been very successful and fast. For example, in 2011 and 2012, the Baltic states had the highest GDP annual growth rate among all post-communist members of the EU\(^12\).

The four EU post-communist members that were also studied (Bulgaria, Romania, Croatia, Slovenia) benefited less from their accession to the EU. They did not manage to use all the possibilities offered as much as the countries of the Visegrad group and the Baltic states. However, it is very difficult to judge precisely which state benefited more, and which state benefited less only from the basic economic data, without econometric research. Our intention was primarily to study the hypotheses that were set at the beginning of this paper. From the study done for the Bertelsmann Stiftung\(^13\), it is clear that the countries of the Visegrad group, the Baltic states, and Slovenia have benefited notably from globalization.

\(^5\) Croatia had a 2.5 times much higher GDP per capita in 2000 than any other Western Balkan state.

\(^6\) In 1990, Slovenian GDP per capita was 8699 USS (measured in current USS), while Portugal’s was 7779 current USS. http://data.worldbank.org/indicator/NY.GDP.PCAP.CD/countries?page=4.

\(^7\) GDP annual growth of Estonia was -14.1%. Latvia had annual GDP growth rate of -18% in 2009, and Lithuania -4.7%. However, the recession in Estonia and Latvia began earlier, in 2008. Of the three Baltic states, Latvia suffered the longest period of recession, while Estonia and Lithuania managed to have a positive economic growth in 2010. The cumulative output losses were even more dramatic – 21% for Latvia (2007-2010) and 18% for Estonia (2007-2009).

\(^8\) Estonia managed to achieve a remarkable annual GDP growth rate, 9.6% in 2011, while in that same year Lithuania achieved 6%, and Latvia 5.3%.

from 1990 to 2011. By average and cumulative income gained due to the increased globalization, Slovenia is in the 11th place in the world. If we look at other post-communist EU members, Estonia is in 23rd place, Hungary is 25th, Latvia 26th, Lithuania 27th, the Czech Republic is 30th, Slovakia 31st, Poland 32nd, Romania 35th and Bulgaria 37th. None of the former or current Western Balkan countries (including Croatia) is placed above any of the countries mentioned. The main reason is the earlier start of EU negotiations, and the earlier EU accession by the countries of the Visegrad group, the Baltic states, Romania and Bulgaria. This fact is logical, since Croatia joined the EU six and a half years after Romania and Bulgaria, and nine years after the other post-communist EU members.

From the results of our research, we have concluded that the main hypothesis of the research was verified, and that the post-communist EU members have had significant economic benefits from their accession to the EU. The second hypothesis was also verified, since Croatia, as the last country that has joined the EU, has not performed as well economically as the other post-communist EU members that joined the EU earlier. The third hypothesis was also verified, since there are visible differences between the post-communist members regarding their economic performance in the period from 1990 to 2012.

**LITERATURE**


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ABSTRACT

Port represents a very complex system that involves many actors with different roles, and their interaction. Model of port management in Croatia fundamentally distinguishes the role of public sector as holder of port management process and economic operators as operators of port activities. Well-defined elements of the system are a prerequisite for its efficient functioning.

Information system management is a management sub-process and management support which is in the modern era of globalization and internationalization a prerequisite for a successful involvement into the world market. It is about increasing the competitiveness of port services, and also promotional elements through the increased availability of information and improvement of business climate.

Designing an information system should be preceded by design of management and operational processes, and processes network in order to provide IT support to system regulations. In addition to integrated management at the port level, an integrated information system is suitable for networking at higher levels, according to the administrative and market criteria.

KEY WORDS: port system, business processes, integrated port information system, business organisation, market.

1. INTRODUCTION

Business performance of the port authority as holder of port system management is the primary subject of improvement and modernization in the context of the aforementioned problem area. Performances of management process based on modern principles of management must provide the flexibility and capability of the organization and system to adaptation to the changing demands of all stakeholders in a globalized and dynamic environment. Activation of feedback mechanism and continuous improvement through the implementation of process approach to business organization is a principle on which every sustainable business organization is based. The advantage of the process approach is constant management over the connection between individual processes within the system of processes, as well as over their combination and mutual interaction.

By implementing an integrated information system various quality mechanisms of operational and strategic management are formed, and it becomes a necessary prerequisite for successful coordination of all system elements. Support to fundamental processes and mechanisms of operational management relate to the process of vessel acceptance, concessions system, monitoring of investment projects and maintenance projects. Numerous mechanisms of strategic management are formed on the basis of reporting support suitable for rapid and transparent insight into all aspects of business operations as well as predicting of trends at the level of every port and at the level of national port system.

2. CHARACTERISTICS OF PORT SYSTEM

In the system of the Republic of Croatia port area of the ports open to public transport is designated as a public maritime domain. Since on the maritime domain, as the area of general public interest under special state protection the ownership may not be exercised, the right to use certain parts of the port for commercial purposes by the private sector is granted through concessions. Management of ports differs by the nature of the port. Ports open to public transport are managed by port authorities. Six port authorities are formed for the ports of special (international) economic interest for the Republic of Croatia and 22 port authorities for the ports of county importance.

1 Znak o pomorskom dobru i morskim lukama, „Narodne Novine“, 2003., br. 158., čl. 2.
2 Znak o pomorskom dobru i morskim lukama, „Narodne Novine“, 2003., br. 158., čl. 3.
3 Odluka o mjerilima za razvrstaj luka otvorenih za javni promet, „Narodne novine“, 2011., br. 32.
The dynamic market trends, in particular the processes of globalization and internationalization have formed a very uncertain and complex environment for the ports, which has led to the change of management concept. The traditional function of the port authority has undergone a transformation. Function of operators turned into a regulatory function and the function of managing the port territory. It is believed that the function of managing the port territory is the most important function of modern port authorities and that the trend of development of a management model according to the “landlord” principle is present. Planning of development of the port, taking into consideration the economic and social context, as well as the creation and implementation of business policy is set as a fundamental interest and subject of activity of those institutions. A dynamic approach and continuous review and establishment of a balance between the elements of the port system and all stakeholders is a necessity that requires a suitably designed management base. It implies transparency and traceability, interpretation and understanding of correlations within the system and between the system and the environment.

3. PORT MANAGEMENT

Management is the process of forming and maintaining the environment in which individuals, working together in groups, efficiently realize the objectives. The management process can be broken down into five management functions: planning, organizing, staffing, leading and controlling.4

Process of port system management suits the business process of the port authority, as an institution whose purpose is port management. The port authority is a non-profit legal entity. Regulation on the founding of port authorities is adopted by the Government of the Republic of Croatia, and it is subject to application of regulations on institutions.5

According to the Institutions Act, the institution is established for permanent carrying out of activities (education, science, culture, information, sports, physical education, technical education, child care, health care, social welfare, care for the disabled and other activities), if the activities are not performed for obtaining profit.6

Basic characteristics and particularities of business performance in non-profit institutions:

- Business performance in non-profit institutions always has a social mission
- The objectives of non-profit institutions are in the function of socially useful value and they are not primarily oriented to economic, but instead to public benefit
- Business performance of non-profit institutions is characterized by the absence of self-interest arising from the ownership
- Non-profit institutions have positional authorities and non-reciprocal revenues and they operate in a less competitive environment than profit companies

Special characteristics of management are derived from common characteristics of non-profit institutions. Planning involves the selection of missions and objectives and actions for their fulfillment.7 The mission or purpose of identifying the primary function or mission of the institution. The objectives of the endpoints which are directed towards activities 8 Specialties planning functions within the management of non-profit institutions are as follows:

- Mission and goals of non-profit institutions are primarily associated with fulfilling customer requests, and only then the consumer
- If the mode of action and choice alternatives are used economic and non-economic methods and criteria
- Mission and business goals for nonprofit institutions coincide.

The organization represents the definition and classification of required activities, grouping of activities, assignment of authorities and insurance of vertical and horizontal coordination. The basic elements of formal organizational structure of the port authority are stipulated by the Institutions Act and by the Maritime Domain and Seaports Act. 9 The Supervisory Board is the highest decision-making level, whose role is to define the mission, objectives and strategic goals, as well as to supervise the execution and orientation toward defined goals. The General Manager is the executive management level. The assignment of duties, powers and authorities must be conducted so as to ensure co-ordination, supervision and control of all stakeholders of the port system.

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4 Weihrick, H., Koontz, H., Menedžment, Mate, Zagreb, 1993., str. 4.
5 Zakon o pomorskom dobru i morskim lukama, Narodne novine, br. 158/2003, čl. 48.
6 Zakon o ustanovama, Narodne novine, br. 76/93, čl. 1.
7 Weihrick, H., Koontz, H., Menedžment, op. cit., str. 119.
8 Ibidem, str. 112.
9 Zakon o pomorskom dobru i morskim lukama, op. cit., čl. 51. – 58.
Controlling consists in measuring and correcting actions with the aim to ensure the fulfillment of the goals of the company and their respective plans.\(^\text{10}\) Specifics of non-profit institutions in the scope of controlling functions as part of the management process are as follows:

- It is very difficult to determine the exact and measurable objectives for non-profit organizations as well as criteria for evaluating the business process.
- Criteria for evaluation of operations are based on the achievement of efficiency and effectiveness, but primarily from the standpoint of the public and not their own good. Effectiveness is the ability to achieve goals. Efficiency is the ability to achieve the objectives of the least amount of resources.\(^\text{11}\) With non-profit institutions of economic indicators, although essential for the functioning of the business process, not the main criterion for success in business.

The external environment of non-profit institutions consists of social, economic, technological and scientific, political and professional elements. Specifics of non-profit institutions result from their business environment. Non-profit institutions are focused on customers and donors. They are often caused by positional institutional social structure, while orientation and directing of their business to a large extent is determined by political elements.

### 4. IS AS SUPPORT TO PORT MANAGEMENT

In the scope of business process of the port authority, port system is managed on several levels. The highest management level refers to management by adopting rules and regulations and their approval. Middle management level represents the formation and adoption of rules and regulations. Lower management level represents the implementation of rules and regulations, collection of feedback and formation of quantitative and qualitative indicators which serve as guidelines when designing system organization and business goals.

The process quality is ensured through the following activities:

1. Definition of the process objectives
2. Description and graphical presentation
3. Definition of process parameters at all levels: according to processes, procedures and staff on the functioning of the process
4. Providing the necessary tools and the adoption of technologies needed to execution and improvement of the processes
5. Measurement parameters and processes
6. Analyses and improvements of processes
7. Validation of the process results
8. Measurements and analyses of customer satisfaction

The process is a system of activities with established rules which uses resources in the aim of transforming inputs into outputs. Quality process management involves clearly defined inputs and outputs as well as points of control in the course of the process and points of interaction among processes. A large amount of operational data and requirements for dynamics at the operational level emphasize the importance of an information base which allows the use of information in real time. Suitable designed reports by application of criteria of reporting in accordance with the measurement criteria related to the objectives at the level of the process, represent an instrument for process management. The structure of an integrated information system should be designed in a way that it supports the management functions at all levels as well as the realization of fundamental and supporting processes (Table 1).

\(^{10}\) Df Weihrick, H., Koontz, H., Menedžment, op. cit., str. 578.
\(^{11}\) Ibidem, str. 11.
Table 1. Functional and management levels of an integrated information system

<table>
<thead>
<tr>
<th>Setting of rules</th>
<th>Procedures and documents</th>
<th>Basic processes</th>
<th>Permissions to access and utilization by users / groups of users in accordance with work tasks and authorizations</th>
<th>Reporting database; reports organized according to different criteria and designed for certain management / operational levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definition of basic elements of the system</td>
<td>- Process steps and flow of activities</td>
<td>- User interface</td>
<td>- Ordinances</td>
<td>- Reporting database; reports organized according to different criteria and designed for certain management / operational levels</td>
</tr>
<tr>
<td>- Ordinances</td>
<td>- Type of document</td>
<td>- Interaction among users in accordance with sequence of actions and matrix of responsibilities / authorizations</td>
<td>- Regulations of the system of concessions, procurement, tariff system, accounting system,...</td>
<td>- Organization of links among documents</td>
</tr>
<tr>
<td>- Regulations of the system of concessions, procurement, tariff system, accounting system,...</td>
<td>- Contents of document</td>
<td>- Organization of communication channels / information flow.</td>
<td>- Relations between documents</td>
<td>- Process definition</td>
</tr>
<tr>
<td>- Relations between documents</td>
<td>- Level of document uniqueness</td>
<td>- Determination of the flow of activities</td>
<td>- Level of document uniqueness</td>
<td>- Determination of control points and their contents</td>
</tr>
</tbody>
</table>

One of the instruments of management is precise definition of rules and laws and ensurance of their implementation within the execution system. The most general and the highest level of IS refers to setting of basic rules of functioning. The instruments of this level of management, which are prerequisites for the transfer of rules onto the operational levels of the system, as part of an information system are the following:

A) in the scope of system administration:
- granting of permissions to access and work

B) definition of basic parameters of individual subsystems
- organization of links among documents
- organization of communication channels / information flow.

C) process definition
- determination of the flow of activities
- determination of control points and their contents

Integrated information system of the port authority consists of a series of modules that support specific business processes and relate to:
- coordination of acceptance of vessels and passengers in the port
- concession system
- procurement system
- accounting
- tariffing
- records of presence of employees
- finances
- plan and execution of the plan
- salaries and personnel
- issuance of permissions for movement in the area of international border crossing
5. PURPOSE OF INTRODUCTION OF AN INTEGRATED PORT INFORMATION SYSTEM

The purpose of introduction of an integrated information system is to enhance the functionality of business performance of the port authority and orientation of operation of the organization towards a well-defined goal, and to create a basis for coordinated approach and balanced management of ports/port systems at the local and national level, by developing an information technology support to core business process as well as management instruments of organizational information nature.

The objectives of the project contribute to the introduction of an integrated information system and may be divided into general objectives and contributions, the objectives and contribute at the level of individual ports and the objectives and contributions at the national level.

General project objectives
- Increasing the efficiency of port systems at the level of individual ports and national port system by unification and standardization of business processes and the formation of managing instruments or information bases to support management system,
- Increasing the quality of port services,
- Improving the conditions and certainty of business performance within the port system,
- Increase of the level of safety standards in the ports.

Goals/contributions of the project at the national level:
- Unique database and information system for all port authorities at the county and state level,
- Unique database of business reports; possibility of a simple, collective and individual inspection of business trends for all ports, unique system of monitoring of traffic according to defined categories, standardized traffic statistical reports
- Standardized reports on other aspects of business; financial statements, reports on concessions/availability and operators of certain services
- Standardized flow and contents of documents related to acceptance of ships and passengers in the ports which allow the lack of overlap and multiplication of certain work procedures
- Database and reporting system that provides easy access to the status and trends within the national port system
- Standardization of business procedures, especially procedures of acceptance of ships and passengers and procedures for concession issuance
- Inspection of certain aspects of the functioning of port systems in foreign ports, easy access and possibility of using knowledge and experiences
- Goals/contribution of the project at the level of individual port authorities/ports
  - Unique system for monitoring traffic according to defined categories, standardized statistical traffic reports
  - Easy access to the status and trends in the individual categories of maritime traffic
  - Providing accurate traffic data from a single unique source to services that operate in the port area
  - Facilitated exchange of information and documentation with business partners
  - Easy access to data in foreign ports that operate at the same market related to the development of tariff models and the definition of tariff policy
  - Easy access to information on the procedure of accepting ships/passengers and required documentation
  - Development of mechanisms for operational and strategic management
  - Transparency and easy overview of business process
  - Implemented principles of feedback and continuous improvement through direct and dynamic link between planning and control
  - Support to all business processes: a one-time data entry, the uniqueness of the data, avoiding multiplication of operations
6. CONCLUSION

Globalization trends in business require the monitoring of economic and non-economic aspects of business, sources and allocation of funds, as well as performance criteria in accordance with the defined purpose of the organization. Consequently, an integrated information system as support to the port system is process-oriented and contains all the elements necessary to manage the business processes of the organization or system. Management subsystem is imposed as a necessary element for positioning at the increasingly competitive global market because it conditions the quality of products as well as creating and maintaining relationships with the business environment.

LITERATURE

8. Zakon o pomorskom dobru i morskim lukama, Narodne novine, br. 158/2003

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SUSTAINABLE DEVELOPMENT AND ALTERNATIVE FUELS
MERICA PLETIKOSIĆ

ABSTRACT
The sustainable development, based on the concept of substitution of fossil fuels by the alternative fuels, with the aim of adapting to climate changes, primarily demands a powerful activity in easing and decreasing the carbon dioxide emission, the largest contemporary environmental threat. All the measures undertaken must be perceived as an investment, and the expenses created now, as a way of avoiding the risks of very harsh future consequences. The economic expenses of switching to alternative fuels, due to the influence on the climate changes, demand good management and risk decrease, so as to maintain the economy sustainability. To achieve such highly set global goals, it is necessary to invest large amounts of effort in informing and sensitizing the public, whose participation is a prerequisite in achieving such demanding aims. This work presents results of empirical research regarding the level of information and attitudes of the interested public, concerning the usage of fuel made from waste as a substitute fuel in the cement industry. The research was conducted on the aim sample, using the in-depth interview and the participating observance. The qualitative method of based theory was used in the analysis of empirical material. The coded material was quantitatively processed and calculated using the Statistica ver. 11.00 computer program.

Aim of the research was to determine the level of information and the attitudes of interested public regarding differences between communal waste incineration in incinerators and co-incineration in the cement industry, as an alternative fuel, as well as the influence on the environment and the cognitions on the alternative fuels usage in the cement plants of the European Union. The research determined the level of information of the aim and the sector groups in relation to sustainable development.

The representatives of all the defined subsamples were largely of the opinion that there were no differences between burning the waste in the incinerators and co-incineration in the cement industry. They considered that the usage of the alternative fuels would have negative consequences on the environment and the health of the population, but also that the usage of such fuels was legally allowed in the cement plants of the EU.

KEYWORDS: sustainable development, carbon dioxide emission, alternative fuels.

1. INTRODUCTION
One of the most significant challenges of today in establishing the sustainable development is represented by the mechanisms of the adjustment to the climate changes by using the substitute fuels. They are used with the aim of decreasing the emission of greenhouse gases that mostly come from fossil fuels. Therefore, managing the risks of global warming by decreasing the carbon pollution is a part of many international agreements that are binding to the economy. The decrease, according to the measures defined by Kyoto protocol for the cement industry, is achieved by the substitution of the fossil fuels with substitution fuels, made from waste, which contain large amounts of biomass. The significant place in this concept of sustainable development is establishing the complete system of waste management, from the decrease of the amount of waste at the place of origin, primary selection and sorting, recycling, and especially material and energetic recovery of the waste. The complete establishment of the waste management system demands significant financial means, but also preparation and public participation. The interested public often expresses opposition to the project, considers that they have no real influence on the decision regarding the realization of the project, and that they have no influence on bringing the decision, besides being informed, what is also a reason for the lack of trust in the procedure. The aim of this research was to determine the level of information and the attitudes of the interested public on the differences in burning the communal waste in the incinerators and co-incineration in the cement industry as an alternative fuel, and the influence on the environment, as well as the cognitions on the alternative fuels usage in the cement plants of the European Union. The research determined the level of information of the aim and the sector groups in relation to the possibilities of usage of alternative fuels in the cement industry in concordance with the sustainable development and the legal obligations regarding adjustment to climate changes.

2. METHODS

The sample of examinees was defined by 100 entities, 55 of which were male and 45 female. The average age of examinees was 47.9 years. Age, education, employment and dwelling are shown in Table 1.

Table 1. Demographic structure of the sample

<table>
<thead>
<tr>
<th>Category</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total sample</strong></td>
<td>100</td>
<td>100%</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>55</td>
<td>55%</td>
</tr>
<tr>
<td>Female</td>
<td>45</td>
<td>45%</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Up to 30 years</td>
<td>3</td>
<td>3%</td>
</tr>
<tr>
<td>From 31 to 44 years</td>
<td>22</td>
<td>22%</td>
</tr>
<tr>
<td>From 45 to 60 years</td>
<td>62</td>
<td>62%</td>
</tr>
<tr>
<td>More than 60 years</td>
<td>13</td>
<td>13%</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High school</td>
<td>28</td>
<td>28%</td>
</tr>
<tr>
<td>College/Faculty</td>
<td>72</td>
<td>72%</td>
</tr>
<tr>
<td><strong>Employment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unemployed</td>
<td>7</td>
<td>7%</td>
</tr>
<tr>
<td>Employed</td>
<td>82</td>
<td>82%</td>
</tr>
<tr>
<td>Retired</td>
<td>6</td>
<td>6%</td>
</tr>
<tr>
<td>Students</td>
<td>5</td>
<td>5%</td>
</tr>
<tr>
<td><strong>City</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kaštelna</td>
<td>39</td>
<td>39%</td>
</tr>
<tr>
<td>Solin</td>
<td>36</td>
<td>36%</td>
</tr>
<tr>
<td>Split</td>
<td>25</td>
<td>25%</td>
</tr>
</tbody>
</table>

LEGEND: N- number of examinees, %- relative values

The examinees were divided into nine subsamples (aim groups) which were qualitatively defined:

ORGANIZATIONS – representatives of non-governmental environmental organizations of Split-Dalmatia County, 10 subjects; TOWNS – representatives of local government employees from Kaštelna, Solin and Split, 10 subjects; BUYERS/SUPPLIERS – representatives of buyers and suppliers of CEMEX Croatia, 10 subjects; POLITICS/SCIENCE – representatives of local political structures and scientists, 10 subjects; SPONSORSHIP AND DONATIONS RECIPIENTS – representatives of beneficiaries and recipients of CEMEX sponsorships and donations, 10 subjects; KAŠTELA RESIDENTS – representatives of neighbours of the plant “Sv. Juraj” in Kaštel Sućurac, 15 subjects; SOLIN RESIDENTS – representatives of neighbours of the plant “Sv. Kajo” in Solin, 15 subjects; CEMEX EMPLOYEES – representatives of CEMEX employees, 10 subjects; COUNTY – representatives of local government employees of Split-Dalmatia County, 10 subjects.

Out of the abovementioned subsamples, three new clusters (sectors) consisting of the total of 70 subjects were classified, which were qualitatively defined as:

PUBLIC SECTOR – 30 subjects from the target groups: TOWNS, POLITICS/SCIENCE and COUNTY.

CIVIL SECTOR – 20 subjects from the target groups: ORGANIZATIONS and SPONSORSHIP AND DONATIONS RECIPIENTS.

ECONOMIC SECTOR – 20 subjects from the target groups: BUYERS/SUPPLIERS and CEMEX EMPLOYEES.

The sample of variables was represented by a group of 3 qualitatively defined questions used in open and/or indirect interview.

The first variable, with the code name differences_burning in incinerators_co-incineration in cement plants, was defined based on the first question:

1. In your opinion, are there any differences in burning the waste in incinerators and the co-incineration in the cement plants?

The second variable with the code name RDF usage in cement plants_harmful consequences was defined based on the second question:
2. Do you consider that the usage of fuel made from waste in cement plants has harmful consequences for the environment?

The third variable with the code name EU cement plants_RDF usage was defined based on the third question:

3. Are you familiar with the usage of fuel made from waste in the cement plants in the EU?

The in-depth interview directed towards the problem, with 100 of examinees divided in nine aim groups and three control sector groups, represent the aim sample of the interested public, rich in information and influential in creating the attitudes of others. After the problem and the aim of the research were presented, all the examinees agreed to participate in this research. Based on the written transcripts, the numeric coding of the answers was performed, with the aim of forming the matrix defined by the total sample of the examinees and the coded variables for further statistic processing. The descriptive analysis determined the frequency of each applied variable with code names for each question, as well as their relative cumulative values.

The quantification of the qualitative empirical material and conversion into the numeric shape was performed with the aim of further execution of statistical methods analysis. The complete statistic processing was executed with the STATISTICA Ver. 11.00 processing package.

3. RESULTS AND DISCUSSION

The examinees’ answers to the first question of this research (In your opinion, are there any differences in burning the waste in incinerators and the co-incineration in the cement plants?) were defined at three levels.

First group was classified according to the negative answer and it represents those entities who answered: No, there is no difference in burning waste in incinerators and co-incineration in cement plants. Quantitatively, these answers were coded by number 0 (zero), used in the forthcoming statistic data processing.

Second group was classified according to the affirmative answer and it represents those entities who answered: Yes, there are differences, cement plants are more acceptable because of the high temperatures. Quantitatively, these answers were coded by number 1 (one), used in the forthcoming statistic data processing.

Third group represents those entities who defined their answers as: I am not sure, I am partially informed, I do not know enough, I am not completely informed, I know something but not much etc. Quantitatively, these answers were coded by number 2 (two), used in the forthcoming statistic data processing.

The descriptive analysis determined the frequency of the coded answers in the total sample, as well as nine aim groups that were defined as three new sectors in the analysis process. The analysis and the statistic processing were conducted for all the subgroups classified.

Table 2 shows the results of the frequency for all the entities and the first variable with code name differences_burning in incinerators_co-incineration in cement plants.

Table 2. Relative and cumulative frequencies of the differences_burning in incinerators_co-incineration in cement plants variable, N=100

<table>
<thead>
<tr>
<th>Var</th>
<th>Freq</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>57</td>
<td>57.00</td>
</tr>
<tr>
<td>1</td>
<td>22</td>
<td>79.00</td>
</tr>
<tr>
<td>2</td>
<td>21</td>
<td>100.00</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Legend: 0 – no; 1 – yes; 2 – I do not know, I am not sure


Fifty seven percent of the examinees consider that there was no difference between burning the waste in incinerators and the co-incineration in the cement plants, 22% of examinees was of opinion that the co-incineration in cement plants was more acceptable because of the high temperatures, while 21% of the entities had no opinion on this question because they were not sure of the right answer, were partially informed, did not know enough, were not thoroughly informed, knew something but not much etc.

Table 3 shows the frequency of the differences_burning in incinerators_co-incineration in cement plants variable, according to the previously defined aim groups.

Table 3. The frequencies of the differences_burning in incinerators_co-incineration in cement plants variable according to aim group, N=100

<table>
<thead>
<tr>
<th>Var</th>
<th>ORG</th>
<th>CIT</th>
<th>BUY/SUPP</th>
<th>POL/SCI</th>
<th>SPO.REC/DON</th>
<th>RES/KAŠ</th>
<th>RES/SOL</th>
<th>EMP/CEM</th>
<th>COU</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>6</td>
<td>8</td>
<td>5</td>
<td>6</td>
<td>3</td>
<td>12</td>
<td>9</td>
<td>0</td>
<td>8</td>
<td>57</td>
</tr>
<tr>
<td>1</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>10</td>
<td>2</td>
<td>22</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td>2</td>
<td>5</td>
<td>1</td>
<td>7</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>21</td>
</tr>
<tr>
<td>TOTAL</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>15</td>
<td>15</td>
<td>10</td>
<td>10</td>
<td>100</td>
</tr>
</tbody>
</table>

Legend: 0 – no; 1 – yes; 2 – I do not know, I am not sure

The frequency of the differences_burning in incinerators_co-incineration in cement plants variable according to the aim group shown in table 3 indicate that the representatives of all the defined subsamples largely were of opinion that there was no difference in burning waste in incinerators and co-incineration in cement plants, with the 57% part. The EMP/CEM aim group was of opinion that the cement plants were more acceptable because of the high temperatures during co-incineration, with the 10% of the total relative value of 22%. Largest number of entities from the SPON/DON. REC group considered that they did not have enough information, were not sure and did not know if there was a difference in burning waste in incinerators and co-incineration in cement plants, with the 7% part.

Table 4 shows the frequencies of the differences_burning in incinerators_co-incineration in cement plants variable, according to the previously defined sector groups.

Table 4. The frequencies of the differences_burning in incinerators_co-incineration in cement plants variable according to sector group, N=70

<table>
<thead>
<tr>
<th>Var</th>
<th>PUBLIC</th>
<th>CIVIL</th>
<th>ECONOMY</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>22</td>
<td>9</td>
<td>5</td>
<td>36</td>
</tr>
<tr>
<td>1</td>
<td>5</td>
<td>4</td>
<td>10</td>
<td>19</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>7</td>
<td>5</td>
<td>15</td>
</tr>
<tr>
<td>TOTAL</td>
<td>30</td>
<td>20</td>
<td>20</td>
<td>70</td>
</tr>
</tbody>
</table>

Legend: 0 – no; 1 – yes; 2 – I do not know, I am not sure

The negative code answer for the differences_burning in incinerators_co-incineration in cement plants variable according to the sector group had the highest numeric value in the public sector, where 31% of the examinees or 22 representatives from the total number analysed were of opinion that there was no difference in burning waste in incinerators and co-incineration in cement plants. Ten percentage of the economy sector or 10 representatives were of opinion that there was a difference due to the high temperatures in the cement plants. Seven entities of the civil sector, of the total number of 15 examinees, chose code answer two (2), meaning that they were partially informed and had no opinion on the defined question.

In answering the second question the examinees showed their opinion on the question how much the RDF usage in cement plants had a negative influence on the environment. The examinees’ answers were defined at three levels:

First group was classified according to the negative answer, and it represents those entities who answered: No, there are no negative consequences for the environment, the controls are very strict, no, but the RDF has to be controlled,
there is no damage to the environment etc. Quantitatively, these answers were coded by number zero (0), used in the forthcoming statistic data processing.

Second group was classified according to the positive answer, and it represents those entities who answered: Yes, it has a negative influence for the environment, it would have unforeseen consequences on the environment and the health of the population, I think that the negative consequences would be great etc. Quantitatively, these answers were coded by number one (1), used in the forthcoming statistic data processing.

Third group represents those entities who defined their answers as: I am not sure, I am partially informed, I do not know enough, I am not completely informed, I know something but not much etc. Quantitatively, these answers were coded by number 2 (two), used in the forthcoming statistic data processing.

The descriptive analysis determined the frequency of the coded answers in the total sample, as well as nine aim groups that were defined as three new sectors in the analysis process. The analysis and the statistic processing were conducted for all the subgroups classified.

Table 5 shows the results of frequency of all entities and the second variable RDF usage in cement plants_harmful consequences.

Table 5. Relative and cumulative frequencies of the RDF usage in cement plants_harmful consequences variable, N=100

<table>
<thead>
<tr>
<th>Var</th>
<th>Freq</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>30</td>
<td>30.00</td>
</tr>
<tr>
<td>1</td>
<td>53</td>
<td>83.00</td>
</tr>
<tr>
<td>2</td>
<td>17</td>
<td>100.00</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Legend: 0 — no; 1 — yes; 2 — I do not know, I am not sure

Fifty three percentage of the examinees was of opinion that the RDF usage in cement plants would have unforeseen consequences for the environment and public health. Thirty percent of the entities believe that there are no harmful consequences for the environment if the RDF is used in cement plants, and 17% claims that they do not have enough information, do not know the problem, are partially informed, are not sure, are not acquainted with the problem and they chose the undefined answer.

The analysis of the coded variable RDF usage in cement plants_harmful consequences frequency according to aim group is shown in table 6.

Table 6. Frequencies of the RDF usage in cement plants_harmful consequences variable according to aim group, N=100.

<table>
<thead>
<tr>
<th>ORG</th>
<th>CIT</th>
<th>BUY/SUPP</th>
<th>POL/SCI</th>
<th>SPO.REC/ DON</th>
<th>RES/KAŠ</th>
<th>RES/SOL</th>
<th>EMP/CEM</th>
<th>COU</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
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<td>0</td>
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<td>4</td>
<td>0</td>
<td>5</td>
<td>3</td>
<td>2</td>
<td>5</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>1</td>
<td>7</td>
<td>5</td>
<td>10</td>
<td>3</td>
<td>7</td>
<td>13</td>
<td>4</td>
<td>4</td>
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<td>0</td>
<td>2</td>
<td>0</td>
<td>6</td>
<td>3</td>
<td>3</td>
<td>17</td>
</tr>
<tr>
<td>TOTAL</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>15</td>
<td>15</td>
<td>10</td>
<td>10</td>
<td>100</td>
</tr>
</tbody>
</table>

Legend: 0 — no; 1 — yes; 2 — I do not know, I am not sure

The frequency analysis for the RDF usage in cement plants_harmful consequences variable according to the aim groups shows that only the representatives of COU are in majority of opinion that the RDF usage in cement plants has no negative consequences for the environment. On the other side, 9 representatives of the ORG, BUY/SUPP, and 13 representatives of the RES/KAŠ aim group were of opinion that the damage to the environment would be great if the RDF was used in the cement plants. Of all the entities who participated in this research, the largest number of RES/SOL group was of opinion that they were not well informed and that they did not know about the harmful consequences.
Table 7 shows the frequencies of the RDF usage in cement plants_harmful consequences variable, according to the previously defined sector groups.

**Table 7. Frequencies of the RDF usage in cement plants_harmful consequences variable according to sector groups, N=70**

<table>
<thead>
<tr>
<th>PUBLIC</th>
<th>CIVIL</th>
<th>ECONOMY</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>16</td>
<td>4</td>
<td>23</td>
</tr>
<tr>
<td>1</td>
<td>8</td>
<td>14</td>
<td>36</td>
</tr>
<tr>
<td>2</td>
<td>6</td>
<td>2</td>
<td>11</td>
</tr>
<tr>
<td>TOTAL</td>
<td>30</td>
<td>20</td>
<td>70</td>
</tr>
</tbody>
</table>

Legend: 0 – no; 1 – yes; 2 – I do not know, I am not sure

The negative answer for the RDF usage in cement plants_harmful consequences variable according to the sector group had the largest numeric value in the public sector where 23% of the examinees, or 16 representatives of the total number analyzed, was of opinion that there were no harmful consequences for the RDF usage in cement plants.

The economy and civil sector, with equal parts of 20% or 14 entities, were of opinion that the RDF usage in cement plants was harmful for the environment and public health. Six representatives of the civil sector showed their partial and incomplete level of information.

Regarding the third question, the examinees showed their acquaintance with the possibilities of the RDF usage in the EU countries. The three levels of answers were defined as following:

*First group* was classified according to the negative answer, and it represents those entities who answered: No, usage of RDF in cement plants in EU is not allowed. Quantitatively, these answers were coded by number zero (0), used in the forthcoming statistic data processing.

*Second group* defined their answer affirmatively: Yes, the usage of RDF is legally allowed in the cement plants of the EU. Quantitatively, these answers were coded by number one (1), used in the forthcoming statistic data processing.

*Third group* of the examinees remained undefined and was classified according to the answer: I do not know, I am not well informed, I am not sure, I do not know the facts well enough and I cannot answer etc. Quantitatively, these answers were coded by number two (2), used in the forthcoming statistic data processing.

The descriptive analysis determined the frequency of the coded answers in the total sample, as well as nine aim groups that were defined as three new sectors in the analysis process. The analysis and the statistic processing were conducted for all the subgroups classified.

Table 8 shows the results of frequency of all entities and the third variable with the code name EU cement plants_RDF usage.

**Table 8. Relative and cumulative frequencies of the EU cement plants_RDF usage variable, N=100**

<table>
<thead>
<tr>
<th>Freq</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>00.00</td>
</tr>
<tr>
<td>1</td>
<td>65.00</td>
</tr>
<tr>
<td>2</td>
<td>100.00</td>
</tr>
<tr>
<td>Total</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Legend: 0 – no; 1 – yes; 2 – I do not know, I am not sure

The frequency results analysis for all the examinees and the third variable with the code name EU cement plants_RDF usage shows that not one examinee who participated in this research did not offer a negative answer, nobody claimed that RDF usage in the cement plants in EU was not allowed.

Sixty five percent of the sample considers that the usage of substitute fuels, as well as RDF usage, was legally allowed in the EU countries. Thirty five percent of the sample was not well acquainted with the facts and were not well informed, and remained undefined regarding this question.
Table 9 shows the **EU cement plants_RDF usage** variable frequency, according to the previously defined **aim groups**.

**Table 9.** Frequencies of the **EU cement plants_RDF usage** variable according to **aim group**, N=100

<table>
<thead>
<tr>
<th></th>
<th>ORG</th>
<th>CIT</th>
<th>BUY/SUPP</th>
<th>POL/SCI</th>
<th>SPO. REC/DON</th>
<th>RES/KAS</th>
<th>RES/SOL</th>
<th>EMP/CEM</th>
<th>COU</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0100</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>9</td>
<td>8</td>
<td>1</td>
<td>10</td>
<td>6</td>
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<td>4</td>
<td>10</td>
<td>7</td>
<td>65</td>
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<td>2</td>
<td>1</td>
<td>2</td>
<td>9</td>
<td>0</td>
<td>4</td>
<td>5</td>
<td>11</td>
<td>0</td>
<td>3</td>
<td>35</td>
</tr>
<tr>
<td>TOTAL</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>15</td>
<td>15</td>
<td>10</td>
<td>10</td>
<td>100</td>
</tr>
</tbody>
</table>

Legend: 0 –no; 1 – yes; 2 – I do not know, I am not sure

The representatives of the BUY/SUP and RES/SOL **aim groups** were least informed on the RDF usage in cement plants of EU, with the 20% part or 35 entities who were of opinion that they did not know the EU normative and regulations. The representatives of POL/SCI and CEM/EMP were sure of the positive answer to this question, because all the entities of this **aim group** showed identical attitudes.

Table 10 shows the **EU cement plants_RDF usage** variable frequency, according to the previously defined **sector groups**.

**Table 10.** Frequencies of the **EU cement plants_RDF usage** variable according to **sector group**, N=70

<table>
<thead>
<tr>
<th></th>
<th>PUBLIC</th>
<th>CIVIL</th>
<th>ECONOMY</th>
<th>TOTAL</th>
</tr>
</thead>
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<td>0</td>
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<tr>
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<td>51</td>
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<tr>
<td>2</td>
<td>5</td>
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<td>9</td>
<td>19</td>
</tr>
<tr>
<td>TOTAL</td>
<td>30</td>
<td>20</td>
<td>20</td>
<td>70</td>
</tr>
</tbody>
</table>

Legend: 0 –no; 1 – yes; 2 – I do not know, I am not sure

All the sector groups, with the total part of 73% or 51 examinee, mostly were of opinion that RDF usage in EU cement plants was allowed. The examinees of the economy sector were least informed, with the quantitative value of 13%, from the total of 27% who had no opinion.

### 4. CONCLUSION

This work presents the results of empirical research regarding the level of information and the attitudes of the interested public concerning the usage of fuel made from waste as substitute fuel in the cement industry in Croatia. The research was conducted on the aimed subsample by using the in-depth interview and participating observance method. The qualitative method of based theory was used in the analysis of the empirical material. The coded material was quantitatively processed and calculated using the Statistica ver. 11.00 computer program. Most examinees consider that there was no difference between burning the waste in incinerators and co-incineration in the cement plants, while a significant number of entities had no opinion regarding this question, since they had no information. The largest numeric value was found in the public sector, where one third of the examinees was of opinion that there was no difference between burning the waste in the incinerators and co-incineration in the cement plants. Most examinees were of opinion that the usage of fuel made from waste in cement plants would have unforeseeable consequences on the environment and the health of the population, although most people had the information that the usage of the fuel made from waste was legally allowed in the cement plants in the EU. The result analysis shows that the representatives of the aim and sector groups differ in the used variables, depending on the belonging to the group. The interested public does not have an adequate amount of reliable information related to the possibilities of using the alternative fuels in the cement industry, respecting the principles of sustainable development, and the legal obligations regarding the adjustment to the climate changes. The result analysis according to aim and sector groups indicate that all the examinees have access to a minute and inadequate part of the information, based on which they create their attitudes and offer solutions, while none of the aim groups had adequate amount of information necessary to perceive the total, which is why their solutions deepen, instead of solving the problem.
LITERATURE


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ESTIMATING MONTHLY GDP IN CROATIA: A TEMPORAL DISAGGREGATION APPROACH*

PETAR SORIĆ
VJERAN BULJAN

ABSTRACT
The estimation of high frequency Gross Domestic Product (GDP) series is of vital interest for each country. Namely, that enables the researchers to obtain timely information regarding possible turning points in the fluctuations of the national economy. This paper adds to the literature by estimating monthly Croatian GDP using three different temporal disaggregation procedures: Chow-Lin, Fernandez and the Litterman method. The empirical results firmly confirm the Fernandez method as the superior one, generating monthly GDP which closely cyclically follows the quarterly figures. This paper provides only the initial effort in employing temporal disaggregation in the Croatian national accounts system. Future research should certainly include other macroeconomic aggregates such as main GDP components, population size, etc.

KEY WORDS: temporal disaggregation, national accounts, Chow-Lin procedure, Fernandez procedure, Litterman procedure.

1. INTRODUCTION
Economic researchers often face the problem of not having the appropriate frequency of analyzed variables at hand. For example, some business tendency surveys are carried out only on the yearly basis (IMD, 2014), while it would be extremely beneficial for the researchers to get an insight from higher frequency data. The problem even magnifies in efforts to date the turning points of business cycles. Namely, a proper macroeconomic reference series should ideally be available at least at monthly frequencies, so information about the potential economic shocks would not be mitigated or even eliminated by the quarterly/yearly character of the data at hand. Due to the painful experience of the recent global economic crisis, academics and practitioners around the globe are trying to raise the frequency of macroeconomic data as much as possible in order to provide timely information about the possible new downturn. As a result, efforts have been made recently of calculating world GDP even in real time (Golinelli & Parigi, 2014).

On the other hand, Croatia is still standing still. Cerovac (2005, p.2) stresses that only five world countries regularly publish their national accounts databases in monthly frequencies. Unfortunately, Croatia is not one of them so Croatian researchers uniformly use monthly industrial production as a proxy for the overall economic activity (see e.g. Erjavec, Cota & Bahovec, 1999). The rationale for such approach is quite straightforward. The official Croatian GDP figures were started to be published in as late as 1997, so the focus on industrial production (as a proxy for GDP) seemed the only way one might collect enough observations to conduct a proper econometric analysis. Not less important, industrial production is highly correlated with the Croatian GDP. Cerovac (2005, p.4) finds a correlation coefficient of 0.85 for the two series in growth rates, and as much as 0.99 for the series in levels.

Although at first it might seem that there is no need to complement the Croatian official statistics with a monthly GDP estimate, this paper aims to do that by utilizing the most popular temporal disaggregation methods (Chow-Lin, Fernandez and the Litterman procedure). The newly obtained monthly GDP indicator will serve its purpose if the empirical analysis shows that it is more closely related to quarterly GDP then the Croatian industrial production. Using graphical and correlation analysis it is found that the Fernandez estimator provides the best fit with the actual quarterly GDP data, even better then the industrial production series.

2. LITERATURE REVIEW
Temporal disaggregation methods are commonly used by national statistical offices for the estimation of short-term macroeconomic indicators such as GDP or its main components. The stated variables are generally published on quarterly basis, and the role of temporal disaggregation techniques is to enable the assessment of their flash monthly estimates. According to Proietti (2006, p.357), a number of developed European countries such as France, Italy, Belgium and Portugal are regularly using temporal disaggregation for constructing their quarterly/monthly national economic accounts.

Moving the focus to Asian countries, it can be observed that a vast number of countries still publish their GDP and other national accounts data only at the yearly level. This deficiency almost entirely disables their researchers to conduct any kind of proper macroeconometric analysis. In order to circumvent that, several attempts have been made to raise the frequency of GDP data. For example, Abeyesinghe and Lee (1998) use the Chow and Lin (1971) procedure to calculate the quarterly Malaysian GDP on the

* Note: invited paper
basis of official annual GDP data and industrial, agricultural and service level outputs as explanatory variables. The authors use three different univariate interpolation methods (spine, join and step) on annual GDP as benchmark models. The obtained results unambiguously prove that the Chow-Lin estimates have significantly better predictive characteristics than the univariate ones.

Abeyesinghe and Rajaguru (2004) repeat the same empirical exercise for China and a group of ASEAN countries (Indonesia, Malaysia, Philippines and Thailand). Again the Chow-Lin estimates of quarterly GDP appeared to be of good quality, dominating over univariate interpolation methods.

Islam (2013) employs the Chow and Lin (1971), Fernandez (1981) and Litterman (1983) approaches in order to disaggregate annual Bangladeshi exports to quarterly estimates. The author uses the industrial production index as a high frequency regressor. Based on graphical analysis and the calculated mean root square errors it is found that Litterman (1983) produces by far the worst results. On the other hand, the Chow and Lin (1971), as well as the Fernandez (1981) procedures produce satisfactory results of similar quality.

It is evident that temporal disaggregation methods have found their place in empirical macroeconomic modeling. A large number of researchers use them as a means of raising the frequency of their data. Just to mention a few empirical assessments more, e.g. Bagzibagli (2014) employs the Chow and Lin (1971) procedure for obtaining monthly capacity utilization, consumption expenditures, employment and unit labor cost indicators for the Euro area. Doran and Fingleton (2013) apply the Chow and Lin (1971) procedure to obtain quarterly employment figures for Euro area countries and the US, etc.

Two main conclusions can be drawn from the reviewed literature. First, the Croatian national account system is still lagging behind developed western countries in terms of utilizing advanced temporal disaggregation methods. This paper aims to correct for that. Second, the literature is quite silent on the empirical comparison between the three most commonly employed disaggregation methods. Therefore this paper aims to fill in that niche for the case of Croatian GDP.

3. METHODOLOGY AND DATA

This paper uses temporal disaggregation methods to obtain monthly frequencies of Croatian GDP. In general, these methods are used to decompose a low frequency time series \( y_1 \) to a high frequency one \( y_2 \). In doing so; the mean, sum, first or the last observation of the newly composed high frequency series has to be consistent to the starting \( y_1 \). That way the structure of the underlying series is kept coherent and comparable. In order to be as precise as possible, temporal disaggregation methods often employ several additional high frequency regressors. This is also the route taken here. The monthly Croatian GDP is obtained by utilizing three competing estimators: Chow and Lin (1971), Fernandez (1981) and Litterman (1983). Croatian industrial production and retail trade volume are used as supplementary explanatory variables.

The introduction of industrial production in the model is motivated by the findings of Cerovac (2005) and by the common usage of industrial production as a proxy for GDP in Croatia. The relevance of retail trade as a determinant of the total Croatian economic activity is, on the other hand, well established in the literature (see e.g. Sorić and Marković (2010) and all the paper cited there). Quarterly GDP is expressed in the form of base index (2005=100), just as the retail trade \( (RET) \) and industrial production \( (IND) \) hereinafter, 2010=100). The whole observed dataset (spanning from January 2000 to November 2014) is gathered from Eurostat. The analyzed regressors are graphically presented in Picture 1.

**Picture 1.** Graphical presentation of the analyzed variables

![Graphical presentation of the analyzed variables](source: Eurostat; authors’ calculation)
The general description of all temporal disaggregation methods from quarterly to monthly frequencies can be given as follows. It is assumed that \( y_h \) can be described by a multiple regression equation with \( p \) regressors, which is valid for \( 3n \) months (\( n \) quarters):

\[
y_h = X\beta + u,
\]

where \( y_h \) is a \( 3n \times 1 \) vector, \( X \) is a \( 3n \times p \) matrix and \( u \) is a random vector with mean 0 and a covariance matrix \( \Sigma \). Additionally let \( C \) be a \( n \times 3n \) matrix used to convert \( n \) quarterly observations of \( y_q \) into \( 3n \) monthly observations of \( y_h \):

\[
C = \begin{bmatrix}
1 & 0 & 0 & 0 & \ldots & 0 \\
0 & 0 & 1 & 0 & \ldots & 0 \\
0 & \ldots & 1 & 0 & 0
\end{bmatrix}
\]

All three estimators apply the Generalized Least Squares Regression (GLS). The GLS estimator \( \hat{\beta} \) is then obtained as a function of \( \Sigma \) and \( C \):

\[
\hat{\beta} = [X'C'(C\Sigma C')^{-1}C]^1X'C'(C\Sigma C')^{-1}y,
\]

The estimate \( \hat{y}_h \) is then obtained in a stepwise fashion (see Sax & Steiner (2013) for a neat overview). The first step is to estimate a preliminary quarterly series as \( \hat{y}_q = \beta X \). The second step includes calculating \( \hat{y}_h \) as follows:

\[
\hat{y}_h = y_q + Du_1,
\]

where \( u_1 \) is a \( n \times 1 \) vector of differences between the annualized values of \( y_q \) and the actual values \( y_q \):

\[
u_1 = y_q - Cy_q,
\]

Likewise, \( D \) is a distribution matrix defined as:

\[
D = \Sigma C'((C\Sigma C')^{-1}.
\]

The part where temporal disaggregation procedures differentiate from one another is the estimation of variance-covariance matrix \( \Sigma \).

Chow and Lin (1971) assume that the monthly residuals follow an AR(1) process \( u_t = \rho u_{t-1} + e_t \), where \( e_t \) is \( WN(0,\sigma_e^2) \) and \( |\rho| < 1 \). This assumption leads to the following specification of \( \Sigma \):

\[
\Sigma = \frac{\sigma_e^2}{1-\rho^2} \begin{bmatrix} 1 & \rho & \ldots & \rho^{n-1} \\
\rho & 1 & \ldots & \rho^{n-2} \\
\vdots & \vdots & \ddots & \vdots \\
\rho^{n-1} & \rho^{n-2} & \ldots & 1 \end{bmatrix}
\]

It is therefore evident that Chow and Lin (1971) condition the monthly residuals to be stationary. This is possible only in cases of stationary or cointegrated regressors.

Litterman (1983) relaxes that assumption by modeling monthly residuals as a nonstationary random walk process \( u_t = u_{t-1} + \nu_t \), where \( \nu_t \) is an AR(1) process: \( \nu_t = \rho \nu_{t-1} + e_t \) and \( e_t \) is \( WN(0,\sigma_e^2) \). In case of Litterman (1983), \( \Sigma \) is calculated as follows:

\[
\Sigma = \sigma_e^2[\Delta'\Delta]^{-1},
\]

where \( \Delta \) is a \( n \times n \) difference matrix with 1 on its main diagonal, 1 on its first subdiagonal and 0 elsewhere; while \( H \) is a \( n \times n \) matrix with 1 on its main diagonal, \(-\rho\) on its first subdiagonal and 0 elsewhere.
Finally, Fernandez (1981) is just a special case of Litterman (1983), where the autoregressive parameter \( \rho \) is equal to zero. That way the variance-covariance matrix \( \Sigma \) becomes:

\[
\Sigma = \sigma_r^2 (\Delta \Delta )^{-1}.
\] (9)

Macroeconomic time series are often modeled using a logarithm transformation. This approach dates back to Box and Cox (1964), who find that such transformation stabilizes the variance of the series and effectuates in the model errors being closer to the pre-assumed white noise process. The log-linear transformation is explicated even further by e.g. Banerjee et al. (1993). In the context of this paper, all three temporal disaggregation procedures are also considered in their log-linear forms since this should lead to the model residuals being homoskedastic and normal.

RATS software is used for estimation purposes (Doan, 2008). In doing so, the average of three consecutive observations of the newly composed monthly GDP series is maintained at the value of starting (quarterly) GDP series.

4. EMPIRICAL RESULTS

All three considered estimators are applied both in their linear and log-linear specification forms. The obtained model parameters are presented in Table 1.

Table 1. Estimated model parameters

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>IND</td>
<td>0.763427* (0.000047)</td>
<td>-0.21203* (0.00183)</td>
<td>-0.04494* (0.00213)</td>
<td>0.04695* (0.00006)</td>
<td>-0.00158* (0.00002)</td>
<td>0.004991* (0.000040)</td>
</tr>
<tr>
<td>RET</td>
<td>0.257853* (0.000056)</td>
<td>0.55904* (0.00099)</td>
<td>0.54957* (0.00067)</td>
<td>-0.00174* (0.00007)</td>
<td>0.00573* (0.00001)</td>
<td>0.003460* (0.000009)</td>
</tr>
</tbody>
</table>

Note: * denotes significance at the 1% level. Standard errors are given in the parentheses.

After concluding that all the estimated parameters are highly significant, it is crucial to examine whether the competing models offer any insight in the monthly dynamics of Croatian GDP. Therefore the correlation coefficients between the estimated monthly GDP and quarterly GDP estimates are given in Table 2.

Table 2. The obtained correlation coefficients

<table>
<thead>
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<tbody>
<tr>
<td>0.767032</td>
<td>0.955333</td>
<td>0.956748</td>
<td>0.38956</td>
<td>0.956923</td>
<td>0.820330</td>
</tr>
</tbody>
</table>

The results from Table 2 clearly indicate that the Chow and Lin (1971) estimator is the worst performer here. This comes as no surprise since the pre-assumption of their model is that the disturbance term follows a stationary AR(1) process. For that to be possible, the time series of interest (if they are I(1) processes as here) have to be cointegrated. This is obviously not the case with the data at hand\(^1\), resulting in the lowest recorded correlation coefficients.


The results presented in Table 2 are more obvious when graphically presented in Pictures 2 and 3.

---

\(^1\) Cointegration test indeed resulted in non-rejection of the null hypothesis of cointegration. Test results are available from the authors upon request.
It is evident that the three estimators do not systematically differ one from another (in linear or log-linear specifications). Also, all three of them closely follow the cyclical movement of quarterly GDP. However, the log-linear specification of Fernandez (1981) indeed produces the best fit by considerably smoothing the GDP series.

The issue of highest relevance here is the correlation coefficient between the quarterly GDP series and industrial production. Namely, if the industrial production itself follows quarterly GDP more closely than do the estimated monthly GDP series, then the procedures implemented in this paper do not offer any added value to researchers. The obtained correlation coefficient between industrial production and quarterly GDP is 0.741725. Therefore it is evident that as much as five out of six estimated monthly GDP series perform significantly better than the so far used GDP proxy in Croatia. In other words, their utilization is firmly justified.
5. CONCLUSION

This paper adds to the literature by estimating monthly GDP series for the Croatian economy. Three different temporal disaggregation methods are compared: the Chow-Lin, Fernandez and the Litterman procedure. Relying on graphical and correlation analysis, the Fernandez procedure is shown to be dominant over the other two competing techniques. This comes as no surprise since the Fernandez estimator is based on the assumption that the variables at hand are not cointegrated, i.e. the model residuals are nonstationary.

Further research should certainly include the temporal disaggregation of other macroeconomic indicators such as main GDP components. Obtaining high frequency macroeconomic data would generate multiple benefits not only for the Croatian academia, but also for the practitioners, analysts and the general public.

LITERATURE


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