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entrepreneurship and economic issues



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# CONTENTS / SADRŽAJ

## ORIGINAL SCIENTIFIC ARTICLES / IZVORNI ZNANSTVENI ČLANCI

1. **Safet Kozarević, Nerka Bešić** ..... 9  
Risk management in telecommunications services in Bosnia and Herzegovina  
*Upravljanje rizicima u telekomunikacijskim uslugama u Bosni i Hercegovini*
2. **Marina Đukić, Ivica Šola** ..... 25  
Preparing the public for commercialization and guidance of structural media space towards its fusion with advertising space  
*Priprema javnosti za komercijalizaciju i usmjeravanje strukturalnog medijskog prostora za spajanje s oglašivačkim prostorom*
3. **Rory James Ridley-Duff** ..... 43  
The FairShares Model: An ethical approach to social enterprise development?  
*FairsShares model: Etičan pristup razvoju socijalnog poduzetništva?*

## PRELIMINARY COMMUNICATIONS / PRETHODNA PRIOPĆENJA

1. **Mario Banožić, Gabrijela Žalac, Marijana Sumpor** ..... 69  
Mapping of tourism potential: The preconditions for the development of tourism in Continental Croatia  
*Mapiranje turističkog potencijala: Preduvjeti razvoja turizma u kontinentalnoj Hrvatskoj*
2. **Danimir Štros, Maja Coner, Daniel Bukovinski** ..... 85  
Management in rural areas  
*Menadžment u ruralnom području*
3. **M. Mercedes Galán – Ladero, Clementina Galera – Casquet** ..... 97  
The role of the retailers in cause-related marketing: A reference to the Spanish case  
*Uloga trgovaca na malo u marketingu opće dobrobiti: Osvrt na španjolski slučaj*
4. **Ilija Nedić** ..... 111  
Break-even point in sugar-beet production  
*Točka pokrića u proizvodnji šećerne repe*
5. **Jerko Glavaš, Luka Stanić, Damir Šebo:** ..... 129  
The impact of the managers' educational level on the development of the knowledge-based organizations: The case of insurance companies in Croatia  
*Utjecaj razine obrazovanosti menadžera na razvoj organizacije temeljene na znanju: Slučaj osiguravajućih društava u Republici Hrvatskoj*
6. **Melita Balas Rant:** ..... 143  
Competing via creation of distinctive organizational competences: "How to do it"  
*Natjecanje stvaranjem svojstvenih organizacijskih sposobnosti: „Kako to učiniti“*
7. **Dijana Mečev, Ivana Kardum Goleš:** ..... 161  
Primary healthcare service quality measurement: SERVQUAL scale  
*Mjerenje kvalitete usluge u ustanovama primarne zdravstvene zaštite: SERVQUAL ljestvica*

8. **Dražen Koški:** ..... 179  
Analyzing disequilibrium in the balance of payments: The case of Bosnia and Herzegovina  
*Analiza neravnoteže u bilanci plaćanja: Slučaj Bosne i Hercegovine*

## REVIEW ARTICLES / PREGLEDNI RADOVI

1. **Dražen Novaković** ..... 199  
Evaluation of the financial performance of pension funds in Croatia  
*Evaluacija financijske uspješnosti mirovinskih fondova u Hrvatskoj*
2. **Martina Harc** ..... 213  
The relationship between tangible assets and capital structure of small and medium-sized companies in Croatia  
*Veza između materijalne imovine i strukture kapitala malih i srednjih poduzeća u Hrvatskoj*
3. **Tomislav Galović** ..... 225  
The international competitiveness of the pharmaceutical industry within 21 OECD countries  
*Međunarodna konkurentost farmaceutske industrije 21 OECD zemlje*
4. **Regina Moczadlo** ..... 243  
Creating competitive advantages – The European CSR-strategy compared with Porter's and Kramer's shared value approach  
*Stvaranje konkurentne prednosti - europska strategija društveno odgovornoga poslovanja u usporedbi s Porterovim i Kramerovim konceptom zajedničke vrijednosti*
5. **Sabina Donlagić, Samira Fazlić, Amra Nuhanović** ..... 257  
Introducing a framework for knowledge economy development in transition countries: The case of Bosnia and Herzegovina  
*Uvodjenje okvira za razvoj ekonomije znanja u tranzicijskim zemljama: Slučaj Bosne i Hercegovine*

## CONFERENCE REVIEWS / PRIKAZI KONFERENCIJA

1. **Jelena Franjković** ..... 269  
Prikaz Erasmus međunarodnog tjedna  
Savonia Sveučilište primijenjenih znanosti - Međunarodni tjedan 2015
2. **Anita Frajman Ivković** ..... 271  
Europski EFOS tjedan 6. – 8. svibnja 2015.: Tvoja mogućnost za budućnost
3. **Nives Tomašević** ..... 273  
Kreativna riznica: Popularizacijski simpozij kulturne i kreativne industrije  
Ekonomskog fakulteta u Osijeku

- UPUTE AUTORIMA** ..... 277  
**GUIDELINES FOR AUTHORS** ..... 279

**ORIGINAL SCIENTIFIC ARTICLES**  
**IZVORNI ZNANSTVENI ČLANCI**

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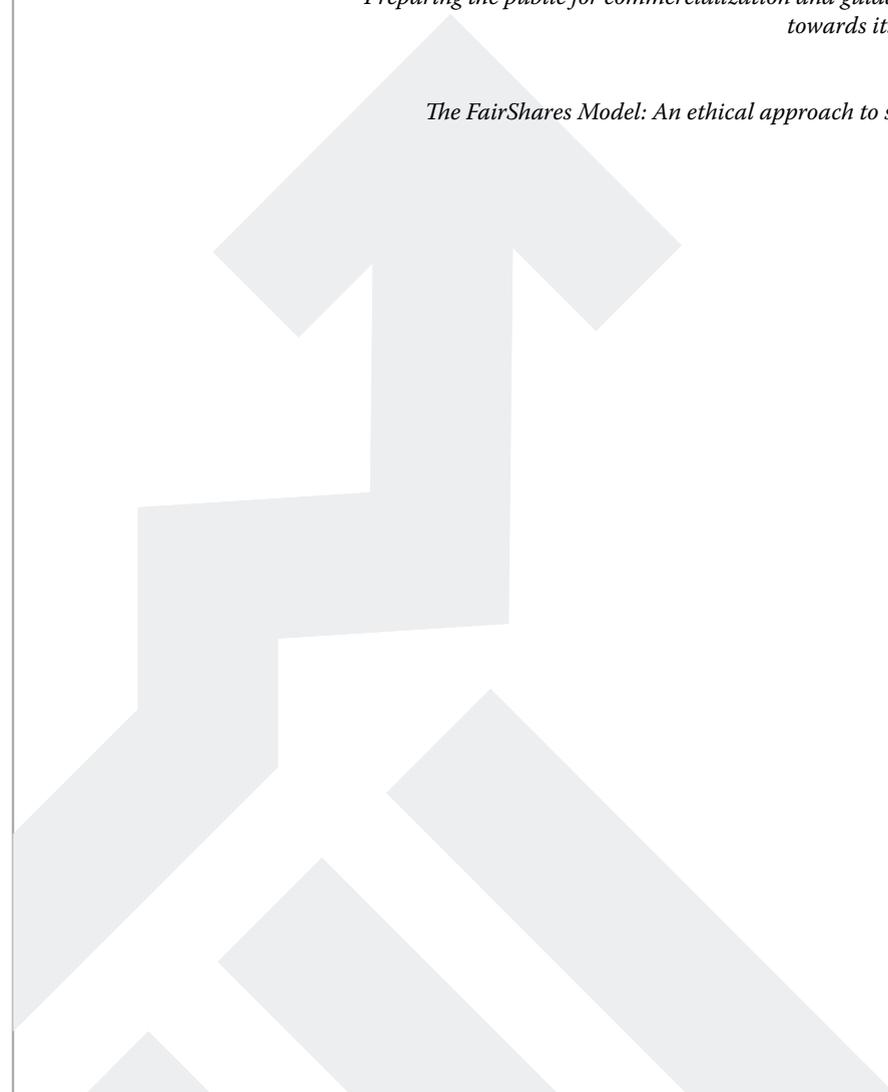
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**Safet Kozarević**  
University of Tuzla  
Faculty of Economics  
Univerzitetska 8,  
75000 Tuzla,  
Bosnia and Herzegovina  
safet.kozarevic@untz.ba  
Phone: +38735320820

**Nerka Bešić**  
BH Telecom, Sarajevo, Regional  
directorates Tuzla  
Aleja Alije Izetbegovića,  
75000 Tuzla,  
Bosnia and Herzegovina  
nerka\_besic@yahoo.com  
Phone: +38761724083

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# RISK MANAGEMENT IN TELECOMMUNICATIONS SERVICES IN BOSNIA AND HERZEGOVINA

## ABSTRACT

In the last few decades, the issue of risk management has become an increasingly important aspect of every company's business activities. Such views are more and more present in the service sector whose GDP share has registered a continuous growth within both national economies and on the global level. Intangibility and some other specific features of services when compared to physical products require a different approach to the activities in the field of risk management, particularly when it comes to capital intensive services such as telecommunications. This type of services is mainly provided within large companies that need to pay attention to the risk management process, from identification, risk evaluation to selection and application of the appropriate risk management method. Risk management methods include a group of methods for the physical control of risk and a group of methods for risk financing by means of risk retention or insurance. All these methods can be applied on a wide set of personal, property and liability risks met by the companies and employees in the telecommunications sector. The paper attempts to present an overview of the specific features of risk management in companies in the telecommunications sectors with the case study of the leading telecommunications service provider in Bosnia and Herzegovina.

**Keywords:** Risk, risk management, insurance, accidents, telecommunications services, Bosnia and Herzegovina

## 1. Introduction

Dynamism, growing complexity of business, noticeable competitiveness, and the global market liberalization lead to exposure to various risks met by economic subjects within their business activities. In other words, risks appear, transform, join and cumulate, which endangers the company's business and its supply chains. That is precisely the reason why risk management needs to be given special attention within supply chain management.

Modern business conditions result in the need for risk management to be an integral part of every company's business strategy. The company's management is well aware that good risk management can help a lot in the reduction of business costs. Risk management aims at protecting the company's property and profit by decreasing potentials for loss and timely discovering new, still unidentified risks that can lead to potential losses (Corbett, 2004; Hodges, 2000).

Christopher's (2005) definition of supply chain management as "the management of upstream and downstream relationships with suppliers and customers to deliver superior customer value at less costs to the supply chain as a whole" shows how important risk management is for supply chains today (Bandaly et al., 2012; Ritchie and Brindley, 2007; Singhal et al., 2011). This is particularly evident in the service sector where, due to the specificities of the service product in comparison to the traditional supply chains, the risk management process is far more difficult to organize. It is very important to define the scope within which risks would be observed. The latest stage in the evolution of risk management is Enterprise Risk Management (ERM) which represents a holistic approach to risk management. It includes the correlation among various risks aimed at minimizing risk exposure for a company as whole, whether the risks come from natural or political, economic, and technical sources. Nowadays, ERM has a very significant role in the regulation and business of financial institutions, primarily banks (Cumming and Hirtle, 2001; Rouse, 2004; Wu and Olson, 2010).

When considering risk exposure, a particular importance for economic subjects is given to personal, property, and liability risks, and they will be given the central position in this paper. These are pure risks that are the consequence of chance where the possible outcomes are either "loss" or "no loss", meaning that there is no possibility for a profit as with the speculative risks (Kozarević, 2010). Since a part of an organization's wealth is created by investing into human resources, the possibility for an injury or death of an employee can cause significant loss to that organization. The specificity of these risks lies in the fact that they are related to an individual (employee), which is why managing these risks can be treated as personal risk management. Namely, both companies and individuals (regardless of the company's interest) are interested in these risks. Also, the property provides its owners various benefits, depending on how they use it. Its value can drop or be lost due to a wide range of perils, which cause multiple losses. Property includes movable or immovable goods and/or rights in the company's ownership, which can be represented by money and therefore has a certain value. Also, within its business activity, a company may cause losses for third parties by exposing itself to numerous liability-related risks that, whether the issue is intention or employees' negligence, require a special approach

in the stage of identification and evaluation of these parties' risk exposure. It is important to emphasize that the legislative system imposes various types of liability which is why it is important to discuss the risks that carry this type of liability. Therefore, the company needs to continuously monitor, measure, and find the methods for pure risk management.

Within every national economy, the sector of telecommunications stands out as a specific segment of the service sector (Wu et al., 2011). This sector is characterized by increasing competition and a new generation of telecommunication networks which requires that the telecommunications sector companies redefine their role on the market and create new business models so as to create new sources of profits. These problems do not skirt small economies such as the one of Bosnia and Herzegovina (BIH). Regarding this, the constant introduction of new services, investment into new infrastructure networks, change in employee number as well as changes in professional qualifications of employees may have a significant impact on the number or work-related accidents as well as on the occurrence of potential loss on the company's property and loss to third parties. Since modern business activities in the telecommunications sector are challenging in every respect, including the establishment of business security, where everything is planned and ultimately controlled, it is crucial to understand and predict personal, property and liability risks of potential sudden and unwanted losses. This is certainly one of the most important issues in all stages of supply chain logistics management (Agrell et al., 2004; Bowersox et al., 2002).

The general aim of this paper is to determine the efficiency of the existing procedures for pure risk management, the efficiency of risk transfer by means of insurance, as well as the possibility for improving the existing situation in the telecommunications sector in BIH by determining the key factors that are crucial for the efficiency of the risk management process. Therefore, the focus is on the largest telecommunications provider on the market of BIH, BH Telecom d.d. Sarajevo (joint stock company).

Section 1 introduces the research problem and presents a review of previous researches. Section 2 presents the theoretical background. Section 3 provides the methodology of empirical research, and Section 4 presents the results and discussion of the case study of BH Telecom, while Section 5 wraps up the conclusions.

## 2. Theoretical background

### 2.1 Specificities of risks and risk management in telecommunications services

Today, the telecommunication network presents a "central nervous system" of the world economy. The telecommunications services sector is also a factor of the integration process in a society as well as a factor of the creation of a single market and globalization in business. Besides that, it is largely dependent on the level of development of a certain region in terms of technical-technological and socio-economic contexts. In addition, it also depends on the regulatory frameworks, both national and international (Pejčić-Tarle et al., 2005).

If we observe pure risks management in the telecommunications sector, it is necessary to take into consideration the specificities of this sector. In other words, teletraffic is a complex phenomenon of providing the services of the transfer of various forms of information by activating the resources of the telecommunication network. Along with the accompanying processes and the technology that makes them possible, it is a significant source of various types of perils and possible accidents (Bošnjak, 2001; Ernst and Young, 2010). The risks in this sector also need to be analyzed in the context of the efforts to reduce the impact of these services on the environment, which have been labeled as green supply chain management (Swami and Shah, 2010). Provided that we start from personal risks, the specificities of the risks to which human resources are exposed come from the fact that a significant number of employees in this sector spend most of their working life on the tasks of building new and maintaining the existing telecommunication networks. In the process, they are in a potentially dangerous environment that can jeopardize their health and life. Some jobs are more exposed to risks than others, which is why knowing the employee structure and their business tasks is necessary for the identification of the mentioned risks. Also, when it comes to the important company staff members, who have particular knowledge and skills, their exposure to risks is an important segment of the company's business and it is necessary to plan special programs for the risks to which they are exposed. By appropriate procedures for managing such risks the company casts off a great burden and directs more energy to other business issues. Aimed at improving personal risk management, special attention should

be given to staff training and education. Well-trained staff shall significantly reduce the number of workplace accidents and in case of an accident react better which reduces its negative consequences. Also, a well trained employee shall have a higher productivity.

Perils that the property of telecommunications companies is exposed to are basically related to physical, social and economic sources (Williams et al., 1998). Physical perils are related to natural forces such as fire, storm, etc. while social perils are related to individuals' deviant behavior (such as theft, violence, frauds). Economic perils can be internal (such as inappropriate storage of products) and external (for example a business partner's breaking the contract due to a crisis in its industry). The level of exposure to property risks largely depends on the type of property which the company has, to what extent the property is used, and on the scope of the company's activities. A drop in property value, lost profit and increased costs are negative financial effects of property losses. Technical complexity of the telecommunications system, its high material value, the need for constant functioning of the supply chain, as well as a high level of sensitivity to various possible disorders characterize the property of the telecommunications sector. All the mentioned emphasized the importance of identification, evaluation, and application of appropriate methods for managing property risks in the telecommunications sector in BIH. Namely, the most important property items of the telecommunications companies are fixed intangible assets (patents, licenses, trademarks, software, etc) and tangible assets that include real estate, plants and equipment. Due to the fact that these are all highly valuable elements of business property, potential loss can significantly jeopardize a company's business. Therefore, the analysis of the existing situation in the construction, security, and maintenance is the basis for identifying and evaluating property risks. The liability risks for the losses caused to third parties during business activities can materially endanger and have repercussions on regular business activities of a company. That is the reason why an efficient system of managing these risks is also an important segment of a company's business.

## 2.2 Place or risk management in the organizational structure of companies in the telecommunications sector

The companies in the telecommunications sector in BiH are in the category of large companies. In that context, it is necessary to provide an appropriate organizational solution by which the process of risk management would be improved. Besides the strategy and policy of risk management, meaning the procedures for identifying and evaluating risk, a successful and efficient system of the company's risk management also includes appropriate organizational structures of a company (Andersen, 2010). Under modern economic conditions and rapid market changes that significantly affect the organization of a company's business activities, it is an imperative to establish such an organizational structure that would provide the necessary flexibility and the basis for protection against potential risks of the company (Corvellec, 2009).

Due to the relation among various risks that a business organization is exposed to, a comprehensive approach to risks and coordination among various departments and levels of management increase the probability for the provision of the right programs for risk management (Klinke and Renn, 2002). The company's sectors and services need to be aware of the risks that occur as a consequence of their everyday activities and liabilities in the supply chain. The scopes of management responsibility clearly include the management of risk identification and care for the safety of employees and company's assets. Proceeding from this, the company's management becomes aware of the fact that the function of risk management, when compared to other functions in the company, significantly reduces the total business costs. Consequently, the importance and complexity of this managerial function increases day by day (Ward, 2003). The role of particular business functions in the process of risk management is observed from the aspect of their involvement in the stages of identification and evaluation of the present risks of a company.

## 2.3 Methods for risk management in the companies in the telecommunications sector

Along with the development of the risk management process, numerous methods were developed

for risk management, based on the postulates of statistics, mathematics, financial and actuarial mathematics, etc. Balancing between the profit or the benefits that a certain method brings and the costs it creates is the basic criterion for selecting the method for risk management in the companies in the telecommunications sector. In some cases, outer influence such as state regulations can affect the selection of the method. However, even when such initiatives do not exist, some technique for managing risks must be used due to the following (Williams et al., 1998):

- costs of financing the emerged risk are usually higher than the costs for its prevention and/or reduction of its consequences,
- loss usually creates indirect or hidden costs that are frequently revealed only much later, and
- loss can have an effect on the environment of the given company.

If the loss is of high probability and intensity, the only practical alternative is to avoid such risk. Risk avoidance includes avoiding the property, person, or the activity that can cause the losses. By avoiding risk, the companies in the telecommunications sector become certain that no potential loss would happen. However, bearing in mind the fact that risks act in a combination, accepting the decisions on risk avoidance can mean creating new or expanding the existing risks of the company. Also, the companies in the telecommunications sector are not able to avoid all the risks since some of the risks must be taken due to the nature of the service. That is why risk avoidance is usually not an acceptable option. Finally, it should be mentioned that risk can be so important for the company's existence that its avoidance can in no way be taken into consideration, as is the case in mining (Evans et al., 2007; Komljenovic and Kecojevic, 2007; Kozarevic et al., 2013).

One of the more important ways of risk management is the prevention or reduction of loss probability. It is a set of procedures and methods that act in the direction of potential sources of peril with the aim of preventing the occurrence of an accident. The application of modern methods of prevention and prevention engineering (safety protection on machines and equipment, constant controls of equipment, appliances, etc.) is the most efficient way of physical management of risks and they have a noticeable effect on risk occurrence and its devel-

opment. Besides the measures of technical protection, risks are physically controlled by employees as well. Regarding this, constant education of employees is needed in the field of work protection and fire protection, which enables proper handling of the work system in the companies in the telecommunications sector. This significantly affects the absence or reduction of physical property risks.

Although the measures of loss reduction can be planned even before the occurrence of an accident, their basic function is to eliminate the effect of damage during their occurrence. By this technique, the companies in the telecommunications sector try to reduce the intensity of the potential damage using fire-prevention systems, limiting cash at the cash office, installing burglar-proof systems, etc.

The methods of financing risks ensure the resources for covering the damage by using internal and external resources. Internal financing is also called risk retention while the external financing includes the transfer of risks by means of insurance, contracts, etc. The inability to physically control all the risks present in the companies in the telecommunications sector indicates that they need to be financed.

The method of risk retention implies that the identified and evaluated risk is retained completely or partially. This method enables a simpler and faster way to cover the entire loss, neglecting the evaluated amount of the lost profit that occurred as the consequences of teletraffic loss. Also, risk retention as the method of risk financing is in many cases the best possible way for managing the risks that result in relatively small losses.

Insurance is the most appropriate method for managing the risks with the low probability and high amount of potential loss. By managing risks in the telecommunications sector by means of insurance, the potential loss, meaning the uncertain financial expenditure, turns into a definite cost, that is, insurance premium. In that way, business activities are protected from potential costs that cannot be built into the business planning, as it can be done by means of an insurance premium that is a certain cost of the company's business. Bearing in mind the aforementioned, insurance is not the cost but rather the investment that can prevent significant financial losses in business activities of the telecommunications companies due to the sudden losses. For the risks with the high probability of loss, the insurance method is not the proper way to manage risk, since

the higher the probability the higher the premium paid for insurance. Therefore, if the method of risk transfer is used, there always needs to be a reasonable relation between the transfer costs and the value that is transferred. This means that one should not retain the risk with the potential loss that is high when compared to the premium saved by retaining the risk.

## 3. Methodology - Case study: BH Telecom

The telecommunications providers on the market of BiH are BH Telecom d.d. Sarajevo, M:tel a.d. Banja Luka and Hrvatske telekomunikacije d.d. Mostar. This research was conducted at BH Telecom d.d. Sarajevo, as the leading provider on the BiH market. A large number of employees at BH Telecom have jobs with special work conditions. They are exposed to the danger of working with electrical equipment and at heights to construct and maintain the telecommunication network, while the fitting and work with optic fibers can be dangerous due to fire caused by flammable matters. Consequently, one telecommunications activity demands various operations or functions that include the possibility of an injury or disease that was the consequence of dangerous exposure.

It is a fact that in 2012 BH Telecom had assets worth over EUR 700 million, out of which almost 50% belong to material assets. It is an indicator that particular attention should be paid to this type of property, with the aim of protecting it from various risks. The most important property items are immovables, plants and equipment. This is an important value of business property where potential damage can evidently jeopardize the company's business. The basic part of the material assets are access networks, the cable channel system, generating plant and transmission devices, antenna pillars and towers as well as the stock of equipment and investment material that are also threatened by various types of danger.

### 3.1 Risk management methods

Based on the knowledge of the probability of occurrence and size of potential loss, various methods of control and financing for risk management are used

in BH Telecom. The prevention method is used for both personal and property risks. Aimed at managing the risks of poor health, the preventive systematic examinations of employees are taken for early detection of chronic illnesses, illnesses that can be worsened by work, and for the purpose of preserving the health and work abilities of employees. The company also secures preventive examinations for the workers who are hired for the jobs with special work conditions and for those who are transferred to such positions. In terms of property risks, serious technical prevention measures are taken against the risks such as surveillance cameras, a fire protection system and alarm, systems for fire detection and automatic fire fighting systems (sprinkler, COD, foam, powder, steam, as well as hand firefighting equipment: movable fire distinguishers, hydrant, heat detectors, etc.)

At the places where there is a higher probability of the occurrence of fire, special measures of fire protection are taken, depending on the materials and matters handled. Special measures of fire protection refer to the rooms of electric power plants for supplying telecommunications devices. Aimed at the protection of this equipment, special attention should be given to the elimination of all the causes that can lead to a fire as well as to the usage of several specialized fire fighting systems. Also, monitoring and data collection on the condition and application of fire protection measures are made, as well as the training program for the staff in the field of fire protection. Besides the measures of technical protection, certain measures of physical protection are implemented (such as outsourcing for security personnel) that refer to the prevention and discovering harmful events and anti-burglary activities that can result in property loss or put the lives of employees in danger. For the purpose of protecting the property values, preventive maintenance is performed on access networks, the systems of terminal equipment and all other telecommunications equipment in order to ensure proper operating condition and decrease the probability of failure occurrence.

Regarding the risk financing methods, a special role is given to the transfer of risks by means of insurance. Besides employee's accident insurance, a significant part of the property is insured from various risks with some liability risks insured as well. Apart from insurance, other types of risk transfer are rarely used, while a significant part of the risk is retained by the company.

### 3.2 Model

Developing the system for risk management at the telecommunications sector has improved the decision making processes in terms of risk. It enables controlled separation of activities, contributes to the efficient allocation of capital and the company's resources, and protects and increases the company's assets. Starting from the theoretical background described in the previous sections of this paper, we can formulate the model of risk management as the function of three key factors:

$$RME = f(S, M, O)$$

where:

RME – Risk management efficiency,

S – Strategic approach,

M – Risk management methods adequacy,

O – Organization of risk management.

### 3.3 Methodology of empirical research

In order to define the exact indicators of the efficiency of the risk management processes at BH Telecom, the primary research was conducted. The data were gathered by means of a survey with a questionnaire especially made for this purpose. The questionnaire included the questions related to various aspects of risk management. A significant number of them were structured in such a way that the answers were presented in a form of a scale from 1 (the worst) to 5 (the best world's practice). In addition, the subjects answered some of the questions by selecting one or more answers offered, so after every question, the subjects had the option to insert comments, additional remarks and suggestions.

The first part of the questionnaire, *Risk management process*, is in terms of contents the largest and aimed at determining the level of the subjects' understanding of the risk management process. Therefore, the questions are formulated so as to enable the evaluation of the application of various methods for risk identification, risk evaluation, and risk management. The responsibilities regarding risks and adaptation of the existing organizational structure of the company to the risk management process are also problematized in this part of the questionnaire.

Due to a wider discussion of the whole issue of the

risk management process, the risks that go beyond the framework of pure risks are briefly presented in the second part of the questionnaire *Business risks*. This part is dedicated to the identification and evaluation of market risks caused by unexpected market disturbances and economic fluctuation. The issues of the company's readiness to identify various financial risks as well as the changes that emerged in the legal environment are also processed in this part of the questionnaire.

The third part of the questionnaire called *Personal risks* covers the procedure of identification and evaluation of risks to which employees are exposed, in terms of safety and protection at work through the assessment of efficiency levels of defined and adopted procedures/instructions of the company.

The fourth part of the questionnaire, *Property risks*, presents the issue of property risks from the aspect of performing constant identification and evaluation of property risks and assessing the level of presence of a certain method for insurance against property risks. The questionnaire also discussed the issue of application and efficiency of the existing procedures for insurance of property through their implementation.

The fifth part of the questionnaire, *Liability risks*, describes the procedure of identification and evaluation of the company's liability risks as well as the level of the presence of insurance against this type of risk.

The questions in the last, sixth part of the questionnaire named *Resources* are limited to those key risks that are related to investing into technology and equipment that support organization units in managing risks (report software, data bases on potential and present risks, etc.) along with the education of employees in the segment of risk management.

The data were collected by means of an on-line survey, while the questionnaires were distributed by sending an e-mail to the subjects. The total number of filled questionnaires was 53. Within every organization unit there was a survey of all relevant employees who were competent enough to evaluate this specific segment of management and whose perceptions need to be acknowledged during the evaluation of the efficiency of the entire risk management process. These are usually the members of the company's management (board of directors, heads of organizational units, department heads etc.) as well as the bodies of control and revision (in-

ternal control and audit department). Therefore, the research sample was designed as the expert sample based on long-term experience and knowledge of the subjects.

## 4. Results and discussion

### 4.1 Descriptive analysis

According to the subjects, risk identification is mostly based on various types of reports on business while more complex techniques for risk identification such as SWOT analysis, analysis of indirect perils, and flow chart diagrams are rarely used. It is obvious that risks are observed primarily from the point of view of business risks.

It is necessary to provide constant analysis and evaluation of risk in order to achieve early identification of the company's risks, understand their consequences and evaluate the probability of the occurrence of any type of loss, so that the problems could be prevented where possible and the company prepared for unexpected situations. The largest number of the subjects (48%) believes that risk evaluation is mainly based on the usage of statistical methods, followed by the analysis of past experience (46%) and expert evaluation (28%).

The subjects emphasized employees' education (18%) and insurance (17%) as the most present methods for risk management. Only 15% of the subjects think that risk can be controlled and that risk protection is not only the use of the insurance method but also the use of prevention measures. It is also evident that in their relations with business partners, the company makes appropriate guarantees (bank guarantees) that are an integral part of the concluded contracts. Capital reserves are rarely set aside in case of emergency, which can be explained by significant usage of the insurance method in the company, while risk retention is mentioned in only 8% of the cases.

Due to the mutual relations among the risks to which a business organization is exposed, an integral approach to risks and coordination among various departments and management levels increases the probability that the right programs for risk management would be provided. Based on the subjects' attitudes, it is evident that various departments and management levels take care of risk management. A total of 54% of the subjects believe that this task

is usually performed by the heads of organizational units, 48% of them think that this is mainly done by the company's board of directors, while 12% of the subjects think that the company's owners participate the least in the process or risk management.

Appropriate communication related to employees being informed on risk management is confirmed by 73% of the subjects while 27% of them gave negative answers. This confirms that, due to a heterogeneous nature of risk in the telecommunications sector, employees are familiar with the framework for its management. Also, it is evident that the culture of risk as the general awareness of the existence of risks at all management levels as well as the attitude and behavior of employees regarding risks are at a desirable level. This also shows that there is an efficient communication and cooperation at all organizational levels when the risk management process is concerned.

For the purpose of identification, evaluation, control and supervision of risks, numerous reports are made, analyzed and presented to the management. By the adopted procedures the company specifies regular monthly reporting to the management on the following: positive and negative changes and business indicators; the situation with work protection with the suggested improvement measures aimed at reducing labor related injuries and providing a higher level of safety; important internal losses and damage of the company's property; the number of reported and paid damage claims by means of insurance; etc.

As many as 90% of the subjects think that the company has an efficient system of internal control over risk management with the aim of monitoring the efficiency of the company's business, reliability of financial and other types of information, harmonization with regulations, procedures, internal acts and standards of the company.

As many as 38% of the subjects believe that the company insures all its property exposed to risks, while 54% of them think that the company insures over 50% of its property. This proves that insurance is the most present method for managing a company's property risks. This confirms that the importance and efficiency of this risk management instrument was recognized as one of the most appropriate ways for managing property risks.

Seventy-three percent of the subjects confirm that the company gives special attention to risks to which their employees are exposed. Thus, for the purpose of higher protection of workers, all employees are accident insured. Also, 63% of the subjects state that the company insures all its important exposure to liability risks.

Adopting business policies and procedures for risk management, which need to be integrated into the current activities of the company, is one of the more important steps taken with the aim of efficient risk management. Based on 91% of the positive answers given by the subjects, it is possible to state that the company has developed procedures for insuring property risks, personal risks and liability risks that entirely satisfy the company's needs. This is also confirmed by the documents related to the procedure of reporting, registering, evaluating and liquidating losses on the basis of insurance contracts made by the company. Also, the company constantly educates its staff through permanent upgrading of their knowledge and skills in the field of risk management.

#### 4.2 Factor analysis

For the purpose of recognizing the key factors that are crucial for the efficiency of risk management, the collected responses on a 1-5 scale were processed by the application of the method of factorial analysis. By this method a higher number of variables are decreased to a smaller number of the basic variables that affect the development of the risk management process. Determining the basic factors that affect the development of the risk management process should help the company's management in improving risk management.

The factor analysis of the risk management process was conducted on the following 16 original variables whose basic statistical indicators are given in Table 1. The most important results obtained by the factor analysis are related to the correlation matrix presented in Appendix 1.

Table 1 Basic statistical indicators of the analyzed variables

Variables		Mean	Standard deviation
VAR01	Risk avoidance – as risk management method	4.04	0.876
VAR02	Risk prevention – as risk management method	4.17	0.914
VAR03	Executive staff responsibilities regarding risk	3.94	0.818
VAR04	Adaptation of organizational structure to the company's risks	3.51	0.800
VAR05	Holding the strategy of risk management adopted to the company's specificities	3.64	0.787
VAR06	Holding the strategy of the company's business adopted to the company's risks	3.62	0.814
VAR07	Identification of market risks	3.83	1.087
VAR08	Identification of changes in the political environment that directly affect the company's business	3.57	1.217
VAR09	Identification of changes in the legal environment	3.72	1.116
VAR10	Identification of risks to which the sale of telecommunications services are exposed	3.74	0.711
VAR11	Winning new markets aimed at increasing competitiveness	3.23	1.154
VAR12	Risk management as an integral part of the creation of investment projects	3.51	0.891
VAR13	Safety and protection at work defined by the company's procedures	3.58	0.842
VAR14	Delivering reports on the evaluation of risks to authorized executives	4.17	0.643
VAR15	Efficiency of procedures for insurance against the risks to which employees are exposed, property risks, and liability risks	3.60	0.768
VAR16	Investing into technology and equipment that improves risk management	3.38	0.657

Source: Author's calculation

Using the automated analytical tools for multivariate statistical analysis, Kaiser-Meyer-Olkin Measure of Sampling Adequacy of 0.813 ( $KMO > 0.6$ ) and level of significance obtained with Bartlett's Test of Sphericity of 0.000 ( $p < 0.05$ ) were established, confirming the sample correlation matrix adequacy for the factorization.

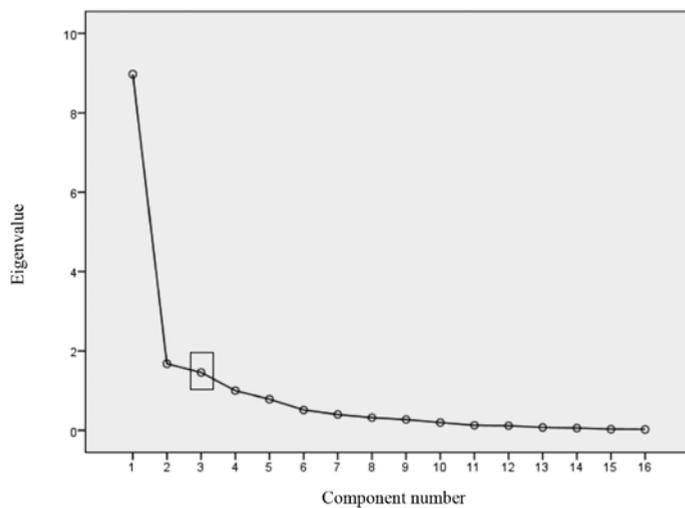
In this research 16 basic variables were reduced by the factor analysis to three factors with eigenvalues higher than 1, which are given in Table 2. These three components explain for 56.08%, 10.48% and 9.10% of the variance, meaning the total of 75.67% of the variance. The shares of these factors are shown in Graph 1.

**Table 2 Total variance explained**

Components	Initial eigenvalues			Extraction sums of squared loadings			Rotated sums of squared loadings
	Total	Variance %	Cumulative %	Total	Variance %	Cumulative %	Total
1	8.973	56.081	56.081	8.973	56.081	56.081	7.992
2	1.677	10.483	66.564	1.677	10.483	66.564	3.260
3	1.456	9.101	75.665	1.456	9.101	75.665	5.203
4	.999	6.247	81.911				
5	.783	4.894	86.806				
6	.512	3.199	90.005				
7	.398	2.487	92.492				
8	.319	1.995	94.488				
9	.272	1.699	96.186				
10	.195	1.216	97.403				
11	.126	.785	98.188				
12	.114	.713	98.902				
13	.072	.448	99.349				
14	.056	.349	99.698				
15	.027	.172	99.870				
16	.021	.130	100.000				

Source: Author's calculation (SPSS 21); Extraction method: Principal Component Analysis.

**Graph 1 The scree plot**



From the scree plot, the breaking point of the diagram is evident on the joining of variables 3 and 4, so that the three variables that explain a greater part of the variance than others are retained.

Source: Author's calculation (SPSS 21)

**Table 3 Rotated factors matrix**

	Factor		
	1	2	3
VAR09	.981	.052	-.086
VAR11	.912	-.152	.000
VAR07	.890	.188	-.134
VAR08	.832	-.059	.054
VAR14	.807	.086	.100
VAR10	.654	.294	-.150
VAR15	.628	-.025	.377
VAR16	.573	-.055	.243
VAR12	.501	.186	.483
VAR02	.038	.913	.056
VAR01	.158	.836	.026
VAR03	-.190	.381	.838
VAR04	.151	-.253	.785
VAR05	.473	-.098	.573
VAR13	.143	.366	.543
VAR06	.509	.117	.538

Source: Author's calculation (SPSS 21); Extraction method: Principal component analysis; Rotation method: Oblimin with Kaiser Normalization.

The data in Table 3 show that the analysis emphasized the three factors that explain 75% of the total variance and that affect the efficiency of risk management. They are:

- Factor 1: The strategic approach which affect all types of risk;
- Factor 2: Application of risk management methods;
- Factor 3: Organizational solutions.

**4.3 Discussion**

The company's aim while managing risks is the appropriate identification, evaluation of loss probability and intensity, and control or prevention of those risks that harm or can possibly harm the company's capability in creating the business strategy as well as long term and short term business goals. Based on the results of the factor analysis, the marked factors serve as recommendations for the direction where to focus the activities for the improvement of the risk management process at BH Telecom.

The strategic approach in risk management, meaning the development of the appropriate strategy and

its efficient implementation are the key activities for improving the process of the company's risk management. The company should develop the so called "Risk management strategy" that would identify all the fields exposed to risk. The implementation of such a strategy requires that the framework for determining, evaluating, monitoring and reporting on risks is completely understood at all levels of the organization with constant education of employees as well as the coordination of risk management. The risk management strategy helps the company's managers to adapt their decisions with the realistic evaluation of the planned and realized results. It also contributes to the making of better decisions on the system improvement, allocation of the necessary funds, and achieving the balance between the acceptable level of risks and their control. Therefore, the company needs to incorporate risk management into the organizational culture by creating a positive organizational culture, build risk management into the processes of planning and making decisions and provide that risk management includes all the sectors of the company's business. In addition, investing into new technology becomes the strategic resource that the company's management combines with other available resources in order to successfully manage business risks. Therefore, the implementation of the appropriate strategy of the company's business is the framework for its successful business activities.

After risks are identified and the mentioned procedures are over, it is very important to select the appropriate method or combination of methods that would, in the best way possible, efficiently remove or control exposure to risks. Depending on the size and type of exposure, certain methods can generate the wanted results, while some others are successful only when combined. It is very important to control the risk, but it is also very important to finance the risk, if it is possible and reduces costs. The main aim of risk control is its minimization, while financing the risk needs to be based on harmonization of the funds available for covering the occurred losses that come as the result of the risk.

A significant level of competition and liberalization of the telecommunications sector, at both the national and international level, demands that the telecommunications provider crate an efficient internal organization through the process of active risk management, all with the aim of better market positioning. Risk management at BH Telecom is

performed in such a way that responsibility is delegated to competent organizational units or sectors which, within the scope of their authorities, recognize, evaluate and control risks. The responsibilities in the risk management process at all organizational levels need to be clearly defined and appropriately delegated with open and simple communication among the employees. An efficient risk management system also requires that the information and acquired experience in terms of new risks and their control are passed onto precisely those organizational units that may be affected by the potential or real risk. Regarding this, it is necessary to ensure that every organizational level of management actively demands and receives the appropriate information on risk management within the scope of its activities that would enable them to plan their activities in relation to the potential risks.

The organizational structure adapted to the real needs of the company is a very important prerequisite of the efficient management of the company's risks. Through the department for the insurance of the company's property and insurance of employees, within its organizational structure BH Telecom has established a system of risk management that is suitable for its size, scope and complexity of its activities.

## 5. Conclusion

The function of risk management, when compared to other functions within a company, has a significant contribution to the total business costs. Therefore, the importance and complexity of this managerial function increases day by day. Its importance is especially evident in the companies that provide telecommunications services. The activities of the telecommunications sector stipulate the functioning of the entire social system but also the life of the contemporary individual. This implies that telecommunications has become a factor that permeates the social life, thus being the basic condition for a modern society with developed information technology. Teletraffic, along with the accompanying processes and the technology that enables it, is a significant source of various types of risks and possible accidents. In accordance to the aforementioned, modern business conditions lead to the need for fundamental knowledge of problems re-

lated to identification, evaluation and managing of risks at all organizational levels of the companies in the telecommunications service sector. Therefore, the need is imposed in that the risk management system has become an integral part of the business strategy of every company in the telecommunications sector with the additional reason being the fact that the company's management is more aware that proper risk management can help in the reduction of business costs. Also, the process itself is aimed at protecting the company's property and profit by reducing potentials for losses and discovering sufficiently early new, still unidentified risks that can lead to potential losses.

Due to the mutual relation of various risks to which a business organization is exposed, a comprehensive approach to risks and coordination among various departments and management levels increases the probability that the right programs of risk management are provided. The company's sectors and departments need to be aware of the risks that occur as a consequence of their everyday activities and responsibilities in the supply chains. The role of individual departments in the process of risk management is observed from the aspect of the level at which these departments are involved in the process.

The implementation of the risk management model for the companies in the telecommunications sector results in the improvement of decision making on risks, it enables controlled activities, contributes to efficient allocation of the company's capital and funds, and protects and increases the company's property. Balancing between the benefit that a certain method brings and the costs it creates is the basic criterion for the application of risk management methods in the companies in the telecommunications sector. In some cases, the outer influence such as state regulations can affect the selection of the method to be applied in risk management.

Bearing in mind the aim of the paper, this research only mentioned certain issues that should be elaborated in some future studies. The emphasis should certainly be on the study into certain types of pure risks, correlation among various risks, insurance application, role of internal audit in the risk management process, and the importance of the emerging risk. All these issues should be discussed separately by sectors, both within the industrial production and services production.

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#### Appendix 1 Correlation matrix

	VAR01	VAR02	VAR03	VAR04	VAR05	VAR06	VAR07	VAR08	VAR09	VAR10	VAR11	VAR12	VAR13	VAR14	VAR15	VAR16
VAR01	1.00	.808	.352	.082	.271	.425	.411	.322	.444	.356	.258	.566	.491	.467	.366	.309
VAR02	.808	1.00	.527	-.015	.300	.424	.436	.309	.331	.366	.236	.435	.418	.343	.207	.243
VAR03	.352	.527	1.00	.486	.595	.718	.335	.264	.256	.304	.217	.568	.551	.311	.484	.327
VAR04	.082	-.015	.486	1.00	.540	.597	.301	.390	.359	.309	.394	.601	.520	.427	.554	.286
VAR05	.271	.300	.595	.540	1.00	.836	.534	.738	.583	.240	.705	.705	.468	.617	.620	.601
VAR06	.425	.424	.718	.597	.836	1.00	.752	.744	.706	.522	.625	.748	.609	.640	.771	.631
VAR07	.411	.436	.335	.301	.534	.752	1.00	.757	.847	.762	.690	.548	.468	.703	.609	.495
VAR08	.322	.309	.264	.390	.738	.744	.757	1.000	.772	.420	.728	.616	.384	.612	.533	.521
VAR09	.444	.331	.256	.359	.583	.706	.847	.772	1.000	.655	.767	.748	.466	.846	.787	.621
VAR10	.356	.366	.304	.309	.240	.522	.762	.420	.655	1.000	.496	.459	.456	.563	.544	.176
VAR11	.258	.236	.217	.394	.705	.625	.690	.728	.767	.496	1.000	.634	.356	.725	.624	.544
VAR12	.566	.435	.568	.601	.705	.748	.548	.616	.748	.459	.634	1.000	.672	.854	.807	.618
VAR13	.491	.418	.551	.520	.468	.609	.468	.384	.466	.456	.356	.672	1.000	.559	.544	.358
VAR14	.467	.343	.311	.427	.617	.640	.703	.612	.846	.563	.725	.854	.559	1.000	.762	.620
VAR15	.366	.207	.484	.554	.620	.771	.609	.533	.787	.544	.624	.807	.544	.762	1.000	.569
VAR16	.309	.243	.327	.286	.601	.631	.495	.521	.621	.176	.544	.618	.358	.620	.569	1.00

Safet Kozarević  
Nerka Bešić

## UPRAVLJANJE RIZICIMA U TELEKOMUNIKACIJSKIM USLUGAMA U BOSNI I HERCEGOVINI

### SAŽETAK

Pitanje upravljanja rizicima posljednjih nekoliko desetljeća postaje sve značajniji dio poslovanja svakoga poduzeća. Ovakva shvaćanja postaju sve prisutnija i u uslužnom sektoru čiji udio u BDP-u kontinuirano raste, kako u okviru nacionalnih ekonomija, tako i na globalnoj razini. Neopipljivost i neke druge specifičnosti usluga u odnosu na fizičke proizvode zahtijevaju i drugačiji pristup aktivnostima u području upravljanja rizicima, a posebno kada je riječ o kapitalno intenzivnim uslugama, kao što su usluge telekomunikacija. Ova vrsta usluga uglavnom se pruža u okviru velikih poduzeća koja moraju posebnu pažnju posvetiti procesu upravljanja rizicima, od njihove identifikacije preko evaluacije rizika do izbora i primjene primjerene metode za upravljanje rizicima. Metode za upravljanje rizicima podrazumijevaju skupinu metoda za fizičku kontrolu rizika i skupinu metoda za financiranje rizika zadržavanjem rizika ili osiguranja. Sve se one mogu primijeniti na širok spektar imovinskih i rizika odgovornosti s kojima se susreću poduzeća i zaposleni u sektoru telekomunikacija. U radu se pokušava dati osvrt na specifičnosti procesa upravljanja rizicima u poduzećima iz sektora telekomunikacija uz studiju slučaja vodećeg telekomunikacijskoga operatera u Bosni i Hercegovini.

**Ključne riječi:** rizik, upravljanje rizicima, osiguranje, nezgoda, telekomunikacijske usluge, Bosna i Hercegovina

Marina Đukić  
Josip Juraj Strossmayer  
University of Osijek  
Department of Cultural Studies  
Trg Svetog Trojstva 3,  
31000 Osijek, Croatia  
mdjukic@unios.hr  
Phone: +385959093088

Ivica Šola  
Josip Juraj Strossmayer  
University of Osijek  
Department of Cultural Studies  
Trg Svetog Trojstva 3,  
31000 Osijek, Croatia  
ivica.sola1@inet.hr  
Phone: +38598256665

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## PREPARING THE PUBLIC FOR COMMERCIALIZATION AND GUIDANCE OF STRUCTURAL MEDIA SPACE TOWARDS ITS FUSION WITH ADVERTISING SPACE

### ABSTRACT

Through genre structure analysis of TV Zagreb's First Channel schedule from the beginning of the 1970's till the end of the 1980's accompanied by analysis of advertising in the same period, the paper will examine the ways and intensity of the entry of commercialization into the Croatian media space dominated then by state media. The television schedule genre change and the broadcasting of the economic propaganda program will point out the different character of the television. It can be said that it will serve for preparing the public for the entry of commercialization and guidance of structural media space towards its fusion with advertising space. The assumption is that in spite of the TV schedule change, which was in the economic sense accompanied by economic reforms in order to establish a market economy, the audience wasn't yet handed over to the advertisers. One of the explanations lies in the role of the media, which at the time had a revolutionary function with the main purpose of creating patriots and not a generation of voters.

The paper will reproduce a kind of public transformation genesis from latent status in the state guided media system to same status of latent consumers in the dual media model.

**Keywords:** Public, commercialization, genres, television schedule, advertising

### 1. Introduction

Many theoreticians agree about the key effects that market-oriented media systems produce. The most obvious concerns the media content itself, which increasingly comes down to only those productive genres and forms which don't need to win the au-

dience over, as they have already proven effective. Even if the audience's wishes are taken into account, it's done in a quite limited manner, one that can be commercially exploited, and the public "isn't treated as a single democratic corps, but merely as a pile of consumers" (McChesney, 2008: 89). The current presence of such a trend in the media surroundings implicate key issues which were sought to be

answered within the frame of this paper, primarily ones concerning its entry point. Using genre structure analysis of the television program during the 1970s and the 1980s on TV Zagreb's First Channel and an analysis of the advertising itself, the paper will consider the methods and intensity of the entry of commercialization into the Croatian media space, which was then under state media domination. The basic assumption is that even though certain structural changes were present in the television program (particularly concerning the present genres, the arrival of new genres, as well as the entry of advertising into the program), it can be argued that the audience was still not being handed over to advertisers. One of the explanations certainly lies in the very role of the media which at the time had a revolutionary function, with the sole purpose of creating patriots, not voters. Such state media policy demanded latent patriots from the public – a public that doesn't get involved, a public that defines a problematic situation solely from the viewpoint of the ruling party's general effort to preserve the status quo (within the tolerances of the actual situation deviating from that projected in the Party's declarations). Even if it is recognized, the participation to resolve the situation remains non-existent. Thus, within the first chapter, the basic media functions are considered, which by their behavior, supported by a certain (de)regulatory agenda, affect the position and the behavior of the public. This is how the different position of the public is distinguished within the framework of the commercial model, in which the media serve to accrue profit and, instead of translating a latent public into an active public (one actively involved in the production and reproduction of society), produce latent consumers. On the other hand, the public service model, whose central idea is public interest, and which is sensitive and open enough for social diversity, even for groups which aren't attractive to advertisers due to their purchasing power, sees its audience as the public, an active public. By explaining the wider media surroundings during the period encompassed by the research, the paper will endeavor to showcase certain expectations with regard to the changes of the public's position considering the transformation of the state media into public media and the entry of commercial media into the Croatian media market. In order to showcase the genesis of the public's transformation from the government-led media system latent state, into the same latent state in a mixed media model, the paper will analyze the tel-

evision program genre structure. This will be done bearing in mind the influence of media contents on the ways in which the public (actively or passively) participates in public dialogue, given the basic features of the most typical media models presented. Therefore, the empirical part of the paper seeks to determine: the change in the character of television, the beginning of the public's preparation for the entry of commercialization into the media space and the structural changes that led to the merging of that space with the advertising space. The aforementioned trends will be observed in the expected growth of commercially-oriented genres or genres which will be named as the "announcers" of commercialization within the framework of the paper.

## 2. The theoretical framework

### 2.1 From a latent to an active public

The present-day public, the recipients of media content, commonly referred to as media consumers, shouldn't only be passive receivers of media messages. In democratic societies, the public space within which a public opinion is formed should be a sphere, "space" in which citizens participate in socially relevant topics (Valković, 2009). The difference in the concepts of participation, activity or inaction is crucial when defining the concept of the public, as well as its positioning in media space. In its primary meanings, the public is linked "with things of general interest or more specifically with official and state affairs" (Lamza-Posavec, 1995: 14). Habermas (1969) defines the public as "a sphere of private people gathered in an audience" which is located in a tension field between the state and society and acts as a self-mediatory organ of the civil society with the state government. Dewey sees the public as an active unit in society comprised of all those who see the common issue for which they can seek a common solution (see Broom, 2010: 201). This represents precisely the aforementioned moment of citizen participation or action regarding socially relevant issues. Considering that the public is the main subject of public opinion, "a 'framework', an environment of public opinion formation in which all citizens should participate in an equal manner" (Valković, 2009: 124), Dewey's definition of the active public unit can be linked to Habermas' (1969) reconstruction of the historical version of the public sphere (elite gatherings in 18<sup>th</sup> century coffee houses

and active participation in political life). Thanks to these gatherings, a literary audience was formed and with the spread of political literature a critical attitude began to develop towards the government's political decisions, so that the free exchange of information and the strengthening of critical thought became the drivers of change (Valković, 2009: 124). From this civil participation phase changes led towards action – the creation of politically active citizens. This idea of an idealized public sphere which kept the government in check with the help of informed and influential public opinion, through direct private conversations, was overcome by the emergence of new corporate interests and the arrival of mass communications which took the place of interpersonal discussions among the elite. The definition of the public sphere as a space which shapes the arena that is more or less autonomous and more or less open for public discussion is better suited in such a new environment (McQuail, 2000). It consists of different networks of public communication which are interconnected by a central compound represented by mass media. The media "make the public communications of smaller arenas available to a broader audience" (Brüggemann, 2010: 7). In doing so they provide the service of informing citizens and ensuring possibilities for their participation, encouraging and forming dialogue, as well as perform the fundamental functions attributed to the public sphere itself, which is why we can discuss the media in terms of public institutions. According to Curran (1996), that is how a model of the public sphere as a neutral zone with wide access to information concerning the public good is formed. Discussion is free, participants are on the same level, and the means of communication make the process easier by creating a single arena for public debate and redefining private civil persons as a public organism in the form of public opinion (see McQuail, 2000). Such action, participation and inclusion without any effect on mutual communication behavior of all participants, is the creation of an ideal communication environment which doesn't exist in a pure form. Jantol talks about an ideally normative public which represents a communication compound in which everyone is equal and has the same communication conditions (2004: 94). Naturally, ideal conditions don't exist and the media, as social institutions, "adopt the form, structures and functions according to the audience's expectations" (McQuail, cited in Valković, 2008: 117). By enabling communication between groups, not

only for physical communication channels but the creation of, for example, customs, habits and public opinion, the media intervene into the public sphere. However, the role of media in a public sphere where everyone should participate is different, just as the very notion of the public sphere is different in terms of independence from any form of interest and openness for public debate. By considering the communication conditions specific to certain societies, a different role of the media and thereby the position of the public will be revealed. In order to determine the position of the public, Grunig and Hunt's (1984) public typology will be used. The authors divide the publics into *nonpublics*, *latent publics*, *aware publics* and *active publics*, thus explaining their perception level of connection with the problem situation they are in, and thereby defining their active or passive communication behavior. So, *nonpublics* don't face the problem or situation they participate in at all. *Latent publics* are immersed into the problem situation, but they don't recognize it or they don't see it as problematic "nor are they aware of their connections with other publics and organizations". Whereas *aware publics* realize they are participating in a problem situation, but they don't share that realization with others. Therefore, the aware public has perceived the faults of the situation, independently or forced under pressure, however, it's still not prepared to involve itself in order to change the situation; although it participates, it's not prepared to act. Lastly, *active publics* communicate and organize themselves in order to take action in a certain situation, which means that they're involved in the effort of changing the situation or resolving the issue – they act. According to Grunig, active communicative behavior is represented in people who seek information regarding the issue at hand, whereas passive behavior is that which is also called information processing because the passive public can, but doesn't have to, take the message into account (see Broom, 2010: 202). Grunig highlights the factors which are instrumental for the transition of the latent public into an active one. A public will become active when the perception of a clear personal connection with a problematic situation is induced. This is where the public's helm is taken over by the media which enable communication in order to "create focused public opinion" and "assign topics that can become the subject of public debate through a selection of events deemed worthy of publication" (Kunczik and Ziefel, 1998: 185). In this way the media intervene

into the public sphere, as well as hold a certain monopoly over it, acting on behalf of different interests and individuals but always under the guise of public interest. Then, the question is how public interest is to be defined and who stands behind it? Today media are more directed towards *manipulating* their audience instead of helping it form a rational opinion (McQuail, 2000). Rovigatti (1985) deems that even public opinion “doesn’t deserve such a name for it’s not the fruit of free conversation of the audience about issues of actual interest: all information is manipulated and shaped by those who own the mass media” (cited in Valković, 2009: 129). This manipulation takes place under the veil of secret public relations techniques. Lippmann states that public opinion is susceptible to control, just as behaviors and opinions, by means of propaganda or consent manufacturing (Barsamiam, 2013). Chomsky describes the period of the 1920s (the birth of “opinion control experts”) as one which introduced the industry control efficiency methodology by which workers were trained to become robots whose every motion is controlled, which “created an efficient industry with people who become automated”. Even though the Bolsheviks tried to apply the same technique, they didn’t realize that you can control not only the time spent at work, but also that outside of work. “Control him by inducing the philosophy of futility, focusing people on insignificant things in life such as fashionable consumption and in principle move them away from yourself. Let people who are supposed to run the show do so without the interference of the masses, who have no business being in the public arena” (Barsamiam, 2013). The gradual entry of commercialization, at least in the genre structure, had the preparation of the public in mind and, considering this transitional aspect, the control of free time as well. Keeping the *status quo* and creating a non-critical and passive public in every way suits the people (interests) who are in the background of the media and who dictate the ways of looking at the society. However, latent publics can be encouraged to activity, and the key factor which Chomsky highlights is cooperation (ibid.). The question raised is to what extent are the media the ones who can encourage the public to participate and what kind of media content is it?

## 2.2 The historical and social framework of media models and policy development

Due to rapid changes and development of new communication technologies, new attitudes toward the role of media in different media models are being accepted. McQuail (2000) sees media changes as the reason for the printed press theory’s inapplicability to other media. Wiio deems that there is no single unique model to act as a framework for the media’s communication behavior because mass media aren’t a single entity and don’t function in some idealized social system (Malović, 2003: 15). There are certain particulars which differ from society to society and from medium to medium.

Since media systems are created within a process of continual stimulation or suppression of a certain type of media, communication structures and communication behaviors, and in that sense they can be more or less democratic, or more or less in the function of public interest (Kurtić, 2014: 136), certain activity models can still be identified. Cuilenburg and McQuail (2003) investigate the development of three types of media policies. The first one is the “communication industry support policy”, which in reality closely resembles a commercial media model typical for the USA. It produces “the stimulation of growth of the free media market and commercial media model by deregulatory cession of the mass media and communication sphere and infrastructure to economic interests of transnational and national commercial media corporations” (Kurtić, 2014: 137). Present from the beginning in the USA, the idea of ensuring the industry’s profitability took hold before public service demands were set; “such dynamics meant that the demand of serving the public is by definition limited” (McChesney, 2008: 79). Except in terms of market efficiency, the media are almost entirely supervision-free. Decentralized control rules out influence by any political or interest group in the creation of programs whereas private property directs the media towards news commercialization (Tomašić and Bijelić, 2008: 185). Albeit theoretically, this media model belongs to decentralized media systems, but taking into consideration the dominant economic interests which run the media (read: owners), one can point to traces of a hidden centralized private model, if we take Wiio’s theory of society’s openness and the level of supervision over the media into account (Malović, 2003: 17). In such systems, it is an individual’s nominal

right to send and receive messages, but also to question them and the way they are controlled. Control is regarded not as censorship but rather as news selection criteria in accordance with production costs and profitability criteria. That a handful of wealthy individuals is “within the means to assert its market power in order to act as an influential cultural gatekeeper” (Freedman, 2008: 106). Led by profit as the supreme principle in production and media content broadcasting, these companies have interests that largely differ from the interests of the major part of the humanity, which then consequently has negative effects on media contents and the public’s position in the public arena mediated by media reports. One of the most visible trends is the one by which the media product is subjected to increasing commercialization seeing as how dominant companies use their market power to extract the biggest possible profit from their product (McChesney, 2008: 33). The media take away the ability and possibility to favor impartial dialogue from public communication. In doing so, “access of private interests into the public sphere opens wide with the danger for that same public sphere to become someone’s ‘property’” (Valković, 2009: 129). Therefore, both the audience and the public are viewed solely as consumers, which means they are valued by how much information they consume, rather than how informed they are, which also promptly points to their communication behavior. Guided by Grunig’s classification, it can be argued that media commercialization leads to the creation of latent consumers or a passive audience. McChesney sees these effects particularly in the media’s hyper commercialization of culture and abandonment of public servitude as well as increasing citizen depoliticization. The public is present, but it is completely demoralized and resigned, and “accepts the state of things as natural” (2008: 73/4). For the hyper-commercialization of the culture, Habermas (1969) calls out the media as the ones who in a commercialized world become the means in the service of “consumer culture”. That signifies the transition from an audience that was critical towards culture to an audience that becomes a culture consumer (Valković, 2009: 125). Acting as a “cultural gatekeeper”, commercial media promote values such as “consumerism, materialism, hedonism, passive society, and the contents lose their value in order to attract an audience and please advertisers” (McQuail, 1998: 110). Consumer latency is guided by psychological gratification, entertainment and illusion of its own position in the

world. Such an ideological process happens mostly due to the public’s dependency on commercial mass media in whose optics the content is focused more on a standardized form of entertainment and superficial, conformist and harmless idleness rather than originality (McQuail, 2000).

The opposite model is one connected to “public service policy” (Cuilenburg and McQuail, 2003) that predominantly deals more in sociopolitical strategy than economic or national and has in its foundations the ideal of a public service in the domain of radio-television communication from which a public service media model typical for European countries has developed. Since the very beginnings in Europe, a strategic importance of the media for the state, nation and industry was noticed, and under the strong influence of the largest European countries’ political traditions, media policy have focused on public monopoly, starting from telegraphs. Here the public interest was the central idea which created the need for a media system that would be *sensitive and open enough for social diversity and stratification*, even for groups who, due to their purchasing power, weren’t attractive to advertisers (Kurtić, 2014). The general goal was the stimulation of public media services in the function of all citizens and public interests, with an agenda dominated by the political and cultural dimensions (Kurtić, 2014: 137/8). Such media models reject centralized control and the mass media (as well as communication itself and the news system) and the audiences are open to different opinions (Malović, 2003: 17). Unlike centralized models, as was the communist one, the individual, not the society, is the one with the right to receive the message and the society has the right to send it. So, society achieves certain supervision over the reception of the message, using this to protect its members from harmful contents and unwanted advertising (Bijelić and Tomašić, 2008: 184). Broadly speaking, an emphasis on citizen participation and involvement is visible in the fundamental features and functions of public services. “It organizes its audience as the *public*, as citizens with different interests and tastes, with a common need for information, education and entertainment” (Car, 2007: 118). Features like the supply of a *universal service*, financing from *all citizens* (not only customers), *public control* over broadcasting, *democratic* responsibility to society (or nation) and achieving different targets of *quality* towards cultural and social priorities of the location (McQuail, 2000) point to public services as a public

forum which “provides citizens with the possibility of an open and plural public debate, free of political and economic interests, regarding the issues and problems of public interest” (Car, 2007: 116). An active citizen’s role is at its core; therefore it needs to “enable citizens to suggest, participate in shaping and evaluating programs” (*ibid.*).

The preceding overview of the essentially opposite media models with different respective media roles as well as different positions of the public whose behavior such media shape, is a useful foundation for explaining the media model present during the period of the 1970s and 1980s in the former SFRY (Socialist Federal Republic of Yugoslavia). The media model in communist states also is called the negative reflection of the public service model. A similarity is visible with the public service model in the monopoly over media services or television control by the state and the complete exclusion of any form of market activity in the media system. The key difference lies in the fact that in the communist model, the media, television especially, were controlled by the Party and used as means of manipulation. In Western democracies, on the other hand, the state or public control didn’t signify state access to media content before its broadcasting, “censorship was forbidden and access to information free” (Car, 2007: 117). In the one-party system of the SFRY, the state media were in public ownership, under the Party’s domination, and in accordance to Wüo’s typology belonged to the model of controlled media and mass communication in general (zone of high supervision) (Malović, 2003: 17). The news system was relatively closed (Bijelić and Tomašić, 2008: 182-183), which means that it was politically (or otherwise) restricted, controlled, and the news selection was limited. News did not have a market function, nor was it familiar with the category of exclusivity. News was news when the Party deemed it relevant to the public. Seeing as how “the state monitored access to information, filtering it and changing it depending on the Party’s interests” (Car, 2007: 117), it is then clear that the public interest was also the Party’s interest. The latter illustrated the revolutionary role of the media that didn’t criticize the regime through controlled reporting, but glorified it and painted the picture of an ideal state. Just as media corporations in the USA set the boundaries of legitimate discussion, in this case those boundaries were set by the Party, which doesn’t mean that criticism was forbidden,

but that the regime and the Party weren’t allowed to be criticized as that was considered harmful for the state and population. The public “was open, as much as it was possible” (Malović, 2003: 17), but under the dominant influence of media-controlled propaganda messages in order to maintain the *status quo*. The public’s presence and activity was left to a single institution (state television), which “always causes exposure to manipulation” (Valković, 2009: 142). Therefore, the public was manipulated with the intent of creating a latent public, a public which doesn’t recognize the problematic situation it is in. At the time the public space didn’t even function because there remained a constant latent expectation that someone else (some other institutions) will act instead of people (Valković, 2009: 142). Jukić doesn’t even talk about a latent public, but confronts the term of the contemporary public with another term – secrecy (Valković, 2009). With Grunig and Hunt’s classification in mind, we can say that for them this “secrecy” would constitute a non-public (those who don’t face the situation they are participating in at all, because that which is relevant is also secret).

This all still doesn’t mean that the public, although threatened, cannot be active. The key drivers for this activity, along with the social framework, are certainly the media themselves. Insight into the television broadcast structure, particularly into genres typical for commercialization trends, and having in mind the public’s behavior in the media models characterized by a high level of media content commercialization, it will be possible to answer the questions regarding what sort of public we are talking about and whether it has in any given moment been handed over to advertisers through broadcasted media content.

### 3. Empirical research methodology

With the goal of identifying the changes in the character of television and the beginning of preparing the public for the entrance of commercialization into the media space as well as the structural changes which led towards the merging of that space with the advertising space, an analysis was carried out in order to review TV Zagreb’s First Channel TV program during the 1970s and 1980s. The research source was a digitalized collection of the *Glas Podravine* newspaper, which contained a

clear weekly television program. The analysis covers weekly television programs from 1975 to 1987. By the end of the 1980s, TV Zagreb already faced its first competition in the form of local private TV stations which began broadcasting and marked the transition from a single state or public media system into a dual state– the mixed public and commercial media model present today. Therefore it is assumed that in the mid-1990s the initial contours of the mostly commercially structured TV broadcasting of today were visible. Considering that the transition from the 1980s into the 1990s was followed by great social change, i.e. a certain social breakdown which completely redefined the role of the media, that period wasn’t researched within the framework of this paper.

Each television unit (show) listed in the TV program with a clear beginning and end of duration served as the analysis unit, which means every television genre represented in the period of the analysis. Some genres, which would be classified today as sub-genres, in the analysis were placed in their parent groups, in accordance with the theoretical framework presented in this chapter in which genres are classified. For example, in the analysis, animation appears in the form of a series, film serial or film and is accordingly categorized. Therefore, the television genres which were clearly indicated in the TV program of the analyzed period on TV Zagreb’s First Channel were: talk show, film, film serial or TV drama series, sitcom, soap operas and telenovelas, game shows and documentaries, which can be in the form of film, series or show, then talent show, sports contents, TV magazines and news.

Considering that the goal was to ensure an equal representation of each period within the research intervals, a systematic two-stage sample was used. In the first stage, every third year during the 1970s and 1980s was selected (1975, 1978, 1981, 1984, 1987). In the second stage, also due to the possibility of unequal representation of certain interval parts (months), instead of a random selection, one winter month, one spring, one summer and one autumn month were systematically selected (January, April, July and November). The research analyzed 3456 television units in total (distributed over the intervals shown in Table 1).

Table 1 Distribution of analyzed television units of the TV program over analyzed years

	1975	1978	1981	1984	1987
Analyzed units	603	860	664	609	720

Source: Own research (2014)

Since an ultimate system and map by which all genres would be classified within the framework of different media don’t exist (Chandler, 2000) – which means that one author will consider something a genre, while another as a sub-genre – for the genre classification within this analysis, the starting point was Neale’s stance, describing genre as “always historically relative and therefore historically specific” (Chandler, 2000) – that means “always correct only for a specific moment in history” (Tomashevsky, cited in Chandler 2000). Therefore, some genres can be defined only in retrospect, but they weren’t recognized as such among their original audience and producers. Evidence of this lies in the difficulties which appeared during the analysis, where, for example, series in the analyzed TV program weren’t separated from shows, just as a film serial wasn’t separated from soap operas during a specific period. Specific changes in the genre structure, as well as the entry of new genres such as talk shows and game shows, will point to Chandler’s stance that television genres “reflect values which were dominant in that period” (2000), or, according to Fisk (1987), that genre standards embody key ideological worries of the times they were popular in. The change in the TV program was accompanied by economic reforms (1964) with the goal of establishing a market economy, which in a certain segment affected the ideological shift from the dominant concept of a socialist-led economy. The influences weren’t one-way, genre transformation goes hand in hand with social conditions, but they too can encourage change. In order to confirm the change in the character of television regarding genre structure with a special emphasis on the so-called “commercial” genres (genres which are here called “announcers” of program content commercialization), the paper used a comparison between Williams’ (1973) genre and a modern content classification (Creeber et al., 2008) taken from Helena Popović (2012). She concludes that the position of public television changed since the 1970s because of the growing commercial

role of television which predominantly offers entertainment contents. The battle for media audiences as well as advertisers, changes both the content and activity of public television (Helena Popović, 2012: 27). Certain categories have remained the same (news, documentaries, drama and children's programs), but the proliferation of new genres typical for modern television is visible in Creeber's classification. Among them are soap operas and comedies (above all sitcoms), then reality television and game shows. In the differences and new genres she observes the propagation of entertainment contents, both in terms "of older genres such as soap operas, situational comedies and talk shows as well as new entertainment genres such as reality television" (2012: 29). Referring to the aforementioned genres, Miller asserts that they are frequently degraded as being of lesser value in the taste hierarchy context, that they are criticized due to populism and commercial aspirations (Creeber et al., 2008: 159). Therefore, we can talk about those forms which are better accepted and viewed by the audience, among which Dahlgren (2002) also highlights soap operas, game shows, popular documentary series and, lately, reality shows (Car, 2007). Popović (2012: 13) thus, for example, counts soap operas, situational comedies, talk shows, game shows and reality television among popular television genres.

Aiming to herald the entry of such programs "as a form of catering to the audience in order to increase viewership", the paper took the following genres as the "announcers" of commercialization and changes: the talk show, film serial, American film, game show, sitcom / comedy series, series / telenovela / soap opera.

#### 4. Research results and discussion

Every historical period carries with it certain particularities which manifest themselves on the character of television as well. That is why during its beginnings television was considered as a status symbol, a symbol of prestige because owning a TV set was proof of a good financial situation. Vončina describes TV Zagreb's program during the 1970s as structured in a way to please different social spheres, and highlights the broadcasting of 144 shows of different character and purpose. Those were "entertainment and music shows, drama programs, daily news, children's programs, direct

broadcasts of sports and concerts, documentary programs, shows dedicated to issues in agriculture and rural areas, as well as debates regarding current social and political themes" (Vončina, 1999: 320). Television sets becoming cheaper didn't change the television's status, but by becoming an integral part of the family's daily agenda, that public-private nature of television affected the nature of programs (Turković, 2008: 269). The 1964 economy reform led to a proper revolution in the attitude of the economy towards consumers when "at the same time people started to pay attention to their reputation and image in both business and general public" (Lakićević, 2013: 4). It was then that the growth of the Yugoslav consumer society became an unstoppable process, begetting a more intense following of consumer trends and seeking role models in Western Europe and the USA, where the imitation went so far as to fully assume the "capitalist" advertising model (Vučetić, 2012: 281). Because of these changes, the TV program analysis begins precisely during the 1970s.

**Table 2 Representation of genres – "announcers" of the 1970s and the 1980s commercialization in TV Zagreb's Channel 1 TV schedule**

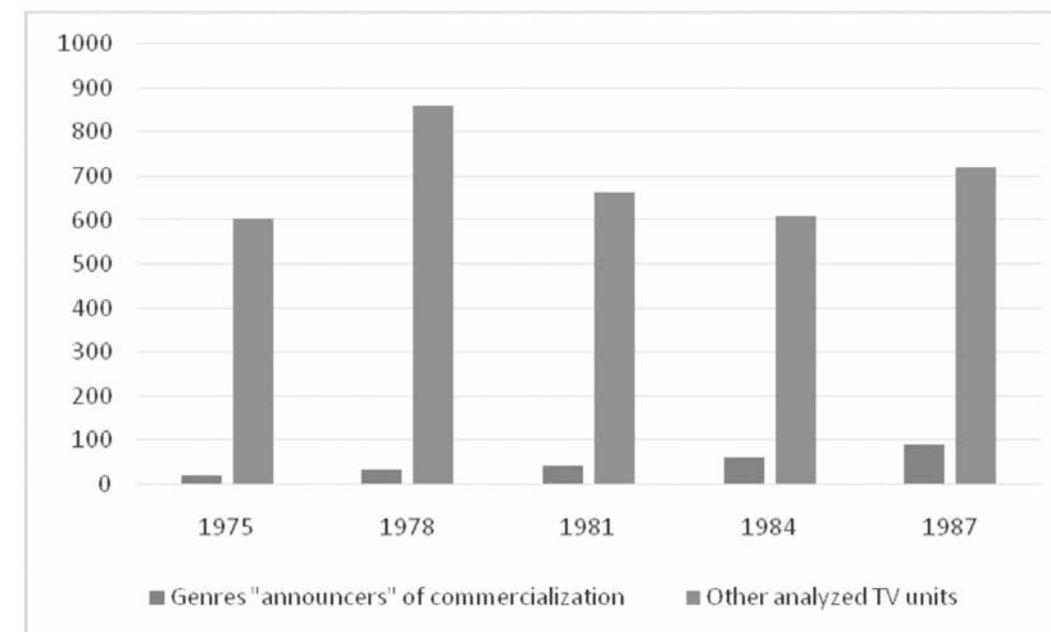
Genres "announcers" of commercialization	1975	1978	1981	1984	1987
Talk show	0	2	5	7	4
Film serial	6	10	8	17	26
American film	3	6	9	5	9
Sitcom/humor series	0	2	1	1	2
Series/soap operas/telenovelas	9	9	17	26	25
Quiz/game shows	0	3	0	1	21
Talk shows	0	0	0	4	3
<b>Total</b>	<b>18</b>	<b>32</b>	<b>40</b>	<b>61</b>	<b>90</b>

Source: Own research (2014)

Time frames as well as the representation of each of the analyzed genres are presented in Table 2, whereas the collective and individual intensity of genre penetration is depicted by Graph 1 and Graph 2. The second part of the analysis refers to spotting the intensity and development of advertising or EPP on TV Zagreb's First Channel. Namely, the term EPP is associated exclusively with former Yugoslavia. At this time there was a massive presence of television in rural and urban areas in which commercials were seen as part of the program and often rated as being of higher quality than the rest of the program. The process of setting up a market economy spawned a new aesthetic in commercials, and, as Čeh notes, gave new wings to the advertising profession (2013: 17). This is also visible in the analysis of the *Ekonomska politika* weekly's adverts between 1969 and 1980, published in *Polet* magazine.

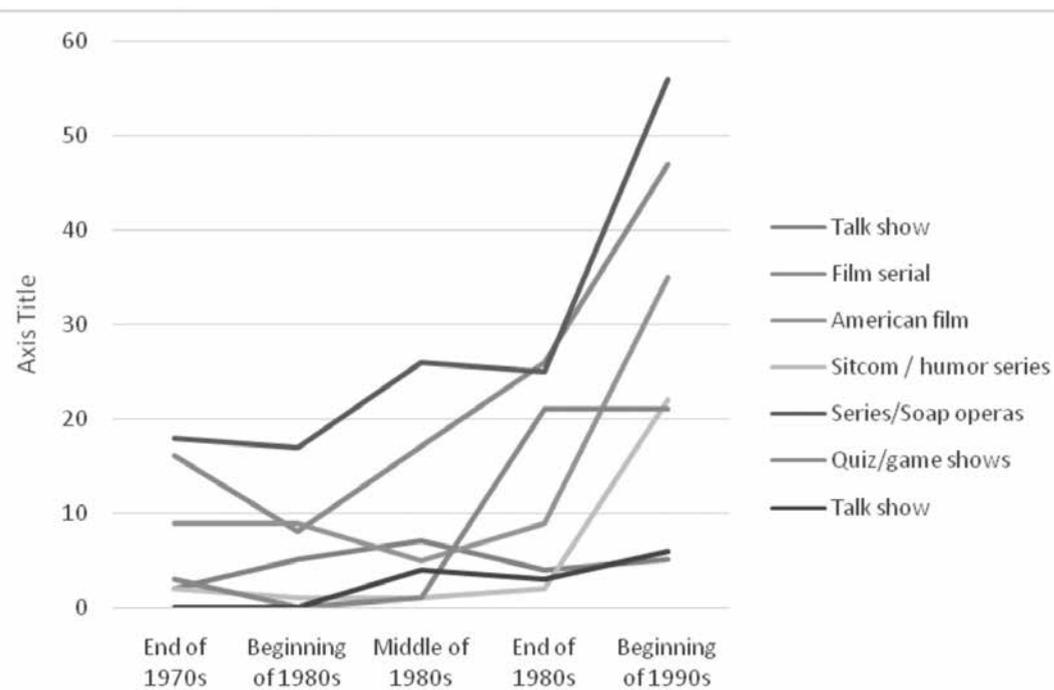
It is an anthology of that time of sorts, which by a visual narrative depicts the relationship of market and economy, the need for getting closer to customers and expanding marketing rules and philosophy. As the authors noted, it was an unusual mix of Western advertising values and socialist aestheticism. Even though the EPP content itself wasn't considered within the framework of this analysis, considering the data from Table 3, which indicates moments of entry, intensity change and duration of commercials, and Table 4 which shows a notable ratio growth of TV Zagreb's self-produced marketing program, it can be concluded that advertising at that point became a significant portion of the TV program and as such affected the change in the character of television.

**Graph 1 Total representation of the commercial program according to the analyzed time period**



Source: Own research (2014)

**Graph 2** Entrance and representation intensity of “commercial” genres according to the analyzed time period



Source: Own research (2014)

**Television TV Zagreb’s character during the 1970’s**

Out of 1463 analyzed TV program units in the 1970s, 3% carried the markings of commercialization in 1975 and 3.7% in 1978 (Table 2 and Graph 2). The unwritten rule during this period was that once per week the TV program presented one cultural and artistic society, most often from Zagreb or Belgrade. A music block was broadcasted on an almost daily basis, most often folk music, a broadcast of some concert or puppet show. By the end of the 1970s, various travel shows and sports matches started to be broadcasted. Delving deeper into the structure of “commercial” genres (Graph 2), it can be noted that the largest share among the analyzed TV program units is taken by series (37 %), film serial (33 %) and American film (18 %).

The significance of films is especially important considering that the 1970s and 1980s were also fruitful periods in the history of Yugoslav film production, but also the spread of American culture throughout the world. Therefore, the share of American film, as a special genre significant as a commercialization “announcer”, points to a change in the character of television which takes place with the start of broadcasting Westerns as a particular type of film typical for the USA. The film serial genre is also a distinctive category considering that it is a term mostly abandoned today in favor of TV drama series. It is a complete film made of multiple physically or temporally separated parts and every episode has its own story. The distinction of drama series in former SFRY is that they were usually expanded versions of feature films in cinema distribution because of which they generally had a format corresponding to that of a mini-series. In the television program the genre “film serial” was often attributed next to the film title, but frequently the listed film didn’t have a sequel so we cannot consider it a genuine film serial.

**Table 3** EPP structure analysis in Glas Podravine’s TV schedule

Year	ADVERTISING MIMICRY	COMMERCIAL DURATION (minutes)	SPECIFICS	DESCRIPTION
April 28 <sup>th</sup> 1970	THE FIRST APPEARANCE in the TV program schedule “PROPAGANDA INTERMEZZO” – the first listed term for a commercial (20:30 -20:35h)			
January 15 <sup>th</sup> 1975	EPP – the first appearance using that terminology (5 minutes), before and after the central evening news(19:21 - 19:27h and 19:55 - 20:00h)			
1975	EP REPORT or EPP	5-10	Regular advertising: “Small Secrets of Great Chefs” and “News from Gorenje”	Advertising of events (Fair of Flowers and Beauty) and companies (Željezara Jasenice, Lek etc.)
1978	Cartoon (EPP) Feature film (EPP) Film serial (EPP)	Undefined	EPP starts broadcasting on TV Zagreb’s Second Channel	EPP is, for example, broadcasted after or before the cartoon “19:15 - 19:27 Hipo and Čipo, cartoon”
1981	Economic-propaganda messages	15-30	Regular Thursday advertising: “Small Secrets of Great Chefs”	Only 6 listings of economic propaganda messages
1984	EPP or Small Secrets of Great Chefs	5-15	Either EPP is listed or only “Small Secrets of Great Chefs” is listed, without indication that it is an EPP report	
1987	EPP	5-15	Almost disappears from the TV schedule which doesn’t mean it disappears from TV screens	Only 3 listings were found
1990 - 1991	Not a single listing for EPP or another term for a commercial is found			

Source: Own research (2014)

**Table 4** Structure, duration and production of TV Zagreb’s television schedule

Year	Self-produced shows in hours	Foreign TV program in hours	Total number of broadcast hours	Average daily broadcast in hours	Foreign TV program share	Self-produced marketing shows share
1975	2227	213	2440,00	6	10 %	4 %
1978	2162	231	2393,00	6	10 %	6 %
1981	2217	171	2388,00	6	7 %	4 %
1984	2644	211	2855,00	8	7 %	5 %
1987	4047	203	4250,00	11	5 %	-
1990	9996	2819	12815,00	35	22 %	-

Source: Croatian Bureau of Statistics, Statistical reports for years 1975, 1978, 1981, 1984, 1987, 1991

In the analysis, a film serial was considered every film which was accompanied by the description of "film serial" regardless if its sequel was broadcasted or not. Most problems appeared with the serial program category which included TV series, soap operas and telenovelas. A series is a type of show that is partly autonomous, but partly continuous from episode to episode. "The most familiar series are soap operas, continuous series, TV series (limited number of episodes), but also various continuous show programs (entertainment, variety, plays), and often even news have features of a series (when consecutively following the development of an event)" (Turković, 2008: 275). Such a genre will greatly attach certain viewers to it and the recurrence of the show opens the possibility of creating television viewing habits, strongly attaching viewers to a certain program over longer periods of time. Even though there is a significant difference between what is considered a series and present-day regard of soap operas and telenovelas, the listed genres are placed in the same category considering there were no terminology differences between them in the TV program. The arrival of soap operas and telenovelas in the Yugoslav media space is linked with TV sets getting cheaper at the start of the 1960s when popular American soap operas *The Long, Hot Summer*, *Peyton Place*, and subsequently various Czech, Polish, German and Italian series began broadcasting (Oršolić, 2013). However, the TV program listed *Dallas* in the "series" genre, as well as *America's Funniest Home Videos*, which actually belongs in the show genre. Also, domestic production series, such as *Slanko*, a children's series, and *Odbornici*, were listed as domestic series, but were more of an educational character rather than commercial.

The 1970s genre shift is followed by an increase in self-produced marketing shows (Table 4) as well as the start of the EPP era (Table 3). Considering the content and small number of such media forms, it could rightly be argued that at the time, as well as in the early 1980s, the audience was still not being handed over to advertisers. It also may not be possible to argue that the audience was active and that it was participating, but it was certainly not reduced to mere latent consumers, at least not in the same sense as today. Some authors, such as Dimitrijević, claim that advertising a certain product in socialism was intended as the sole act of rational introduction with the characteristics and method of use (2013: 13), i.e. that the economic propaganda in SFRY was

never solely in the function of product promotion, but rather in the service of a general idea "coming from above" regarding the stimulation of production and consumption as part of a plan to build a socialist society" (Čeh, 2013: 14). That plan is also visible in the types of advertising messages and companies that were being advertised. Even though almost all market participants in the field of marketing and promotion already existed in the 1970s (advertising agencies such as Vjesnik's agency and market research agency), marketing was also becoming an almost autonomous function in companies. This means that, as is the case today, marketing and advertising were first and foremost business functions which were perhaps only indirectly ideological.

### TV Zagreb's character during the 1980s

A significant ratio increase of commercialization "announcer" genres is visible in the 1980s, an increase from 6% in 1981 to 12% in 1987 (Table 2). 1802 units of titles were analyzed during that period and a deeper insight into the program genre structure reveals the changes that characterized this period. In the beginning of the 1980s, an overview of the program was broadcasted on a daily basis, news several times a day, central evening news, various music shows, sports block, TV calendar, cartoons, morning and evening announcements and the program ran from 18:00 to 22:00 on First Channel, which makes a small difference when compared to the 1970s. The distinction of these years is a greater representation of sport and genre distribution adjustment in regards to a successful period of Yugoslav film production. The result is a smaller ratio of American film (8%) and the increase of domestic film serial (28%). Also talk shows arrived on TV screens, which although not considered as a commercial genre, implicated a greater role in creating public opinion. They were a novelty in the TV program (new genre) and in accordance to the genre classification back then could be considered as a political show. The significance is even greater considering that the separation of serial genres occurred at the time, thus creating educational, documentary, drama and ordinary series which were as such still listed just as "series" in the TV program.

The end of the 1980s indicated the stabilization of the television program since a cartoon for children

was broadcasted every evening at around 19:00 and the game show *Brojke i slova* ("Numbers and Letters") at 18:40. The 23% game show ratio indicates a growth of their popularity. Some of the most famous were *Kviskoteka*, *Poznajete li Jugoslaviju* ("Do You Know Yugoslavia") and *Kolo sreće* "The Wheel of Fortune". In these stages of game show growth, different types of knowledge were sought. Later on, as noted by Fiske (1987), apart from factual knowledge which for the most part was acquired by academic capital, game shows that required "human knowledge" became increasingly popular, which involves being familiar with a certain individual or requires some form of social intelligence. The growth of popularity of the latter indicates the democratization of knowledge, inviting a wider population to participate in the competition. The fact that changes in society affect program structure and lead to changes within genres themselves is indicated by the game show change, because a game show carries within it elements of capitalist ideology where the idea of equal opportunities is promoted as real, just as the idea that certain individuals are simply more capable and should be awarded material benefits (Popović, 2012: 36).

Longer TV program broadcasting (Table 4) leads to the broadcasting of the nighttime and satellite program. The unique aspect of republic televisions within JRT (Yugoslav Radio Television) at the time was a serious concern of the ruling structures regarding the types of TV programs. Since the media answer not to the public but to the sociopolitical organizations, and by logic the republic televisions were sociopolitical institutions, they were more directed towards the informative and educational component of the program. This was logical, as the agenda was to resist the penetration of consumer society, American capitalism, advertising and all things Western so that their role, as noted by Grbelja, was reduced to the transmission of leadership's decisions, conclusions and reflections to citizens (1998: 162). That was the role of a mere medium.

So, it's not difficult to understand why advertising wasn't about handing over the public to advertisers. Commercials mainly promoted a healthier life style (*Small Secrets of Great Chefs* – Table 2) and EPP was certainly not an "aggression" on consumers, which in later years, due to a more intense market orientation, came more prominently to the fore (Ban, 2009: 156). According to Karlović, television "as a decisive medium of the 80s" wasn't "a metaphysical instance

which would rewrite and decide the cultural habits of viewers from above" (cited in Car, 2007: 123), but the entrance into the 1990s was also marked by significant changes – EPP was gone from the TV schedule, entertainment elements were introduced into the program, as well as a change going in the direction of altering viewing habits. This doesn't mean that entertainment elements hadn't existed before, the difference was that "TV entertainment" back then "had to fit into the conservative concept of state television" so that any "colorful excess" would be noticed and remembered. All that was intended to be for public appearance, which included artistic work irrespective of genre and medium, was controlled and permeated by strong censorship.

### 5. Conclusion

The cross section of TV Zagreb's First Channel TV program genre structure and commercials as a media form during the 1970s and the 1980s served as suitable ground for the analysis of social circumstances and characteristics of the particular time and space in which those forms emerged. Having in mind that most values in a society are channeled through television, which processes reality and broadcasts information, and the fact that media contents within the structure of a TV program are in given circumstances broadcasted with the goal of causing a predetermined effect on the audience, this retrospective cross section also served to clearly map the changes in the communication behavior of the audience.

The gradual entrance and continuous growth in the commercialization of "announcer" genres was noted, which, along with the entrance of EPP into television space, points to a change in the character of television at the time. Having in mind the dominant influence of television and the audience which is formed under that influence, an effort was made to establish if there was both a change in the television's character and a change in the audience's status. It was demonstrated that the change of program structure still didn't imply commercialization, at least not in the original sense present in such media models as the American one. That the gradual shift served as a preparation phase for the structural change which prepared the audience for commercialization and by which the media space was guided towards merging with the advertising

space. It was demonstrated that the role of the media (which means the content itself) significantly affects the position of the public in a given media system. Namely, in the communist one-party system the media were under constant supervision of the Party (through direct or indirect information censorship) which reduced them to sociopolitical institutions that transmitted the leadership's official information, conclusions and thoughts to the citizens. Such transmission of information was carried out with the specific goal to influence the audience. That goal came down to the creation of a non-active public, or, as Grunig puts it, *nonpublic* where the media were just a medium which was supposed to create latent patriots, citizens who will believe in the system and will not question its legitimacy. The goal of such a revolutionary role of the media wasn't to create voters, or a participating public, but a public that doesn't get involved because it doesn't need to as it was told how to think. From that perspec-

tive it's not difficult to explain either the direction of the media contents or the very function of EPP at the time. The public wasn't yet being sold out to advertisers back then, since EPP served to promote the socialist economy idea, stimulate the production and consumption side-by-side with its business function.

Present-day media owners find themselves in a position to control mass audiences through the media, to bestow information which unequivocally leads to unilateral conclusions. The fact that the public has been transformed from one type of latent state – latent patriots – into another – latent consumers, is reflected in the very role of the media. Viewers are guided, and it is of no importance whether they are guided by a totalitarian regime or entertainment, both turn them into passive consumers, unimmersed in the problem situation.

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Marina Đukić  
Ivica Šola

## PRIPREMA JAVNOSTI ZA KOMERCIJALIZACIJU I USMJERAVANJE STRUKTURALNOG MEDIJSKOG PROSTORA ZA SPAJANJE S OGLAŠIVAČKIM PROSTOROM

### SAŽETAK

Analizom žanrovske strukture televizijskoga programa od početka 1970-ih do sredine 1990-ih na Prvom programu Televizije Zagreb i njegovim položajem oglašavanja, razmatraju se načini i intenzitet ulaska komercijalizacije u hrvatski medijski prostor u tadašnjem vremenu, pod dominacijom državnih medija. Žanrovsko mijenjanje televizijskoga programa i emitiranje EPP-a (ekonomsko-propagandnoga programa) ukazuje na drugi karakter kojega televizija dobiva, a može se reći da će i služiti kao priprema javnosti za ulazak komercijalizacije, odnosno usmjeravanje strukturalnoga medijskoga prostora za spajanje s oglašivačkim prostorom. Pretpostavka je da unatoč strukturalnim promjenama televizijskoga programa, koje su u ekonomskome smislu bile praćene privrednim reformama, u cilju uspostavljanja tržišne ekonomije, publika još uvijek nije bila isporučivana oglašivačima. Objašnjenje leži u samoj ulozi medija, koji su tada imali revolucionarnu funkciju nestvaranja glasača, već isključivo patriota.

Analizom medijskoga sadržaja prezentiranoga u okviru televizijskoga programa, rad će prikazati svojevrsnu genezu transformacije javnosti iz stanja latentnosti u državnom vođenom medijskom sustavu, u isto stanje latentnosti u mješovitom modelu medija.

**Ključne riječi:** javnost, komercijalizacija, žanrovi, televizijski program, oglašavanje

Rory James Ridley-Duff  
Sheffield Hallam University  
Sheffield Business School  
Arundel Gate  
Sheffield, S1 1WB, United Kingdom  
r.ridley-duff@shu.ac.uk  
Phone: +441142255081

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# THE FAIRSHARES MODEL: AN ETHICAL APPROACH TO SOCIAL ENTERPRISE DEVELOPMENT?

## ABSTRACT

This paper is based on the keynote address to the 14<sup>th</sup> International Association of Public and Non-Profit Marketing (IAPNM) conference. It explores the question “What impact do ethical values in the *FairShares Model* have on social entrepreneurial behaviour?” In the first part, three broad approaches to social enterprise are set out: co-operative and mutual enterprises (CMEs), social and responsible businesses (SRBs) and charitable trading activities (CTAs). The ethics that guide each approach are examined to provide a conceptual framework for examining *FairShares* as a case study. In the second part, findings are scrutinised in terms of the ethical values and principles that are activated when *FairShares* is applied to practice. The paper contributes to knowledge by giving an example of the way OpenSource technology (Loomio) has been used to translate ‘espoused theories’ into ‘theories in use’ to advance social enterprise development. The review of *FairShares* using the conceptual framework suggests there is a fourth approach based on multi-stakeholder co-operation to create ‘associative democracy’ in the workplace.

**Keywords:** Social economy, ethics, solidarity, social enterprise, cooperation, mutuality

## 1. Introduction

In this paper, arguments to the 14<sup>th</sup> International Association of Public and Non-Profit Marketing (IAPNM) conference are reflexively scrutinised to develop a theory of social enterprise ethics. The work was developed and informed by the preparation of the first and second editions of *Understanding Social Enterprise: Theory and Practice* (Ridley-Duff & Bull, 2011; 2015) and participation in the formation of FairShares Association.

The research question is: ‘What impact do ethical values in the *FairShares Model* have on social entrepreneurial behaviour?’ The rationale for answering this question has a personal aspect - the *FairShares Model* (hereafter referred to as *FairShares*) is the product of a three-way relationship between: a decade of research clarifying the role of social enterprise in democratising work (Ridley-Duff, 2002; 2007; Bull, et al., 2010; Ridley-Duff & Bennett, 2011); its impact on social enterprise education (Ridley-Duff & Southcombe, 2012; Ridley-Duff

& Ponton, 2013; Sheffield Hallam University, 2014) and; the dialectical interplay between practitioner and academic input into the development of an association that promotes “multistakeholder cooperation in member-owned social enterprises”<sup>1</sup> (Ridley-Duff, 2012; Ridley-Duff & Bull, 2013; Ridley-Duff & Southcombe, 2014).

The paper is divided into four sections. In the next section, I articulate the value of studying social enterprise in the fields of economics and entrepreneurship. Three approaches are described by linking them to their origins in philanthropic action, mutual exchange and market exchange. This differentiates the ethics of philanthropic, mutual and market approaches and captures them in a conceptual framework. The following section describes how and why a case study of *FairShares* helps to generate theory. The case presents abstract conceptualisations of *FairShares* and descriptions of two examples of practice. In the penultimate section, the conceptual framework is used to analyse the practices found in the case study. The concluding section clarifies the scientific contribution, answers the research question and examines implications.

## 2. Why study social enterprise development?

Studying social enterprise has theoretical and practical benefits for scholars in the fields of economics and entrepreneurship. For economists, social enterprises represent evidence of an alternative to state and private market approaches to economic development (Westall, 2001; Pearce, 2003; Nicholls, 2006). They show that non-state, member-owned firms can successfully create products and services that meet member needs without pursuing profit-maximisation for institutional investors (Ellerman, 1990; Kalmi, 2007; Monzon & Chaves, 2008; Roelants et al., 2014). For students of entrepreneurship, social enterprises illustrate the breadth of rationales for enterprise creation. They show that businesses can bring about social change or reduce dependency on the philanthropy of private firms and state agencies (Ellerman, 1984; Alvord et al., 2004; Nicholls, 2006; Douglas & Grant, 2014).

There is, however, another driver. The United Nations’ PRME Initiative has prompted over 500 business schools to commit to ‘Principles of Responsible Management Education’ (Laasch & Conway, 2015).

These puts ethics, sustainability and social responsibility at the heart of curriculum development in business schools. Accreditation schemes (such as EPAS and AACSB) now insist that lecturers provide tuition in ethics, sustainable development and responsible management, and that institutions engage a wider range of stakeholders in their local community (Doherty & Meehan, 2015).

Developing a conceptual framework to investigate social enterprise ethics requires a consideration of the economic contexts of social entrepreneurs and the way this shapes their entrepreneurial ‘habitus’ (Bourdieu, 1977; Outsios, 2014). Social entrepreneurs who have worked in the public, private and third sectors each face different challenges and may choose a diverse range of strategies to achieve their goals (Ridley-Duff & Bull, 2014). In the next section, I outline these challenges by setting out the implications of Polanyi’s work.

### 2.1 Three approaches to social enterprise development

*The Great Transformation* (Polanyi, 2001 [1944]) examined the rise and fall of market economics up to the 1940s. With the collapse of the Berlin Wall in 1989, and successive financial crises - in South East Asia, South America, US/UK and EU - Polanyi’s views on failures in market systems has re-emerged as important. His account of three socio-economic systems informs the work of European social enterprise researchers (Nyssens, 2006).

Polanyi outlined three systems. Firstly, there are communal principles of *mutuality and reciprocity* out of which have developed cooperative modes of production and consumption. Polanyi also identified *redistribution* (either through charitable acts or compulsory taxation). This creates common pool resources for social investment (or to buttress a community against economic shocks). Lastly, Polanyi described how *production for markets* developed the concepts of gain, profit and loss. Production for markets was driven by calculations of profit to determine whether market conditions warrant continued production.

The challenge of markets to reciprocity and redistribution is two-fold. If opportunities are pursued *only* if there is ‘profit’ for the instigator, many types of exchange stop occurring (Maitland, 1997; Seanor

et al., 2013). Firstly, the logic of *when* to exchange becomes reversed: instead of pursuing projects for the community that are based on an ethical commitment to add to the ‘commons’, projects are supported only if they increase private ownership and personal gain (Chell, 2007; Martin & Osberg, 2007). Secondly, the market system creates an ethical injunction not to engage in mutuality or philanthropy *unless* it will lead to competitive advantage (Achbar, et al., 2004). Under such a system, welfare services are at risk because paying for them is seen as a business cost, not a business benefit. Alternatively, and increasingly, welfare provision is framed as a market opportunity, fuelling the efforts of large private companies to lobby government to secure public service contracts (Klein, 2007; Maitland, 1997; Corbett & Walker, 2012).

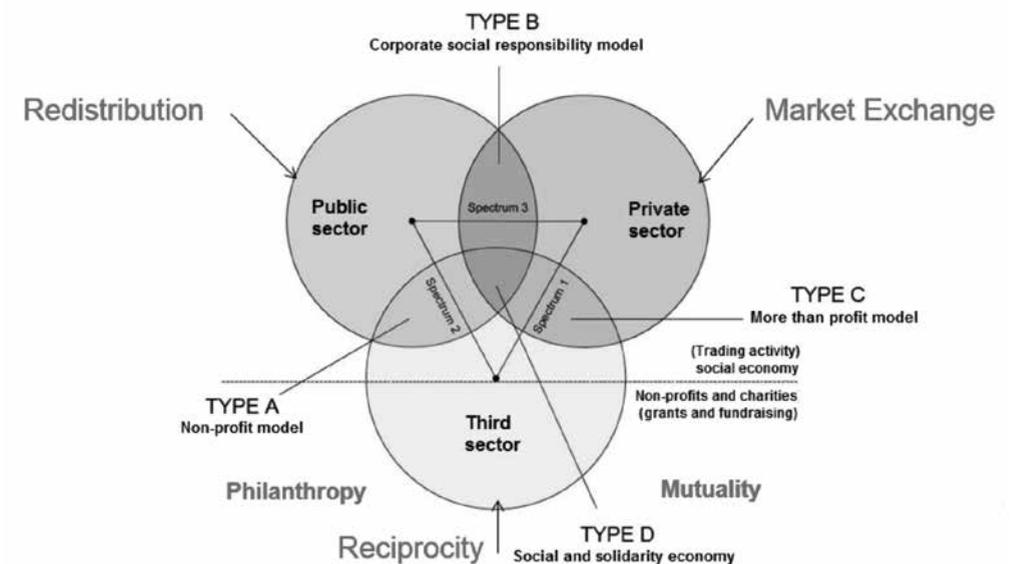
My starting point lies in the argument that Polanyi’s work gives tacit permission to reframe the way systems of exchange are combined to promote sustainable development (Holmes, 2014). Social entrepreneurship research, and social entrepreneurs themselves, are divided over which forms of economic exchange to pursue (Kerlin, 2006; 2010).

An acceptance that markets are natural leads to a view that reciprocity and redistribution are less important. Some schools of social enterprise favour the market and seek to create institutions that support socially entrepreneurial *individuals* (Alvord et al., 2004). As a result, they do not frame collective action for mutual benefit as a form of social entrepreneurship (Kerlin, 2010; Ridley-Duff & Southcombe, 2012; Spear, 2006).

In contrast, a view that markets do not arise naturally and depend for their existence on coercion by political and business elites (Klein, 2007) frames them as an issue that social enterprises seek to address, even to the point of regarding them as a source of harm to wider society and the environment. This creates hostility towards the logic of the market (Nicholls, 2010; Seanor et al., 2013) and a favourable disposition towards mutuality, reciprocity and participatory democracy (Pateman, 1970; Erdal, 2011). It triggers calls for a radical reduction in the influence of stock markets, invites questions about the role of private property, and fuels an ideology committed to collectively run, commonly-owned, enterprises (Dewar, 2007).

My previous research, however, has found a body of people committed to a third proposition: the optimum equilibrium between market exchange,

Figure 1 Economic exchange and approaches to social enterprise



Source: Ridley-Duff and Bull (2015), Figure 2.6.

reciprocity and redistribution in each scenario will produce the best outcomes (Ridley-Duff, 2007; 2008). This mind-set is one of seeking to understand how entrepreneurship can improve well-being across stakeholder groups (Spear, 2006; Spear, et al., 2007; Moreau & Mertens, 2013). It translates into a desire for economic pluralism and a democratic settlement that enfranchises more stakeholders in enterprise development (Smith & Teasdale, 2012; Novkovic & Webb, 2014). In this debate, social entrepreneurship embraces the task of creating deliberative democracies to achieve consensus on how to 'survive well' (Nyssens, 2006; Johnson, 2006; Restakis, 2010; Erdal, 2011; Gibson-Graham et al., 2013: 458).

There is, therefore, no single entrepreneurial pathway or planning system that leads to social enterprise. There are numerous pathways that originate in different sectors: third sector mutuality and philanthropy; public sector attempts at redistribution, and; commitment to ethics and sustainable development in the private sector. In my previous work (Ridley-Duff, 2008), this was the inside the triangle in Figure 1, an ideal space (Type D) for multi-stakeholder member-owned enterprises that coordinate producers and consumers (Whyte & Whyte, 1991; Westall, 2001; Yeo, 2002).

A powerful argument for this is found in Yeo's (2002) critique of Sidney and Beatrice Webb. Yeo claims they undermined the cooperative movement in the UK by fragmenting the identities of the working class through trade unions (as producers), political parties (as citizens) and cooperative societies (as consumers). Yeo argues that this hinders the development of 'associative entrepreneurship' in enterprise formation (Scott-Cato et al., 2008) and the 'associative democracy' between workers and consumers that creates solidarity (Smith & Teasdale, 2012).

In practice, there are many social entrepreneurial destinations: from full participation in a social and solidarity economy (Figure 1, centre) to the creation of social value (along Spectrums 1, 2 and 3) without a commitment to multi-stakeholder cooperation (Dees, 1998; Alter, 2007; Ridley-Duff & Bull, 2014). The pathways that individuals choose depend on their context and the ethics that inform their choices. As social entrepreneurs are faced with many choices that involve judgements about the merits of reciprocity, redistribution and market exchange, the values associated with each pathway are not likely to be the same and will affect the outcome.

### 2.2 Ethical commitments in each approach to social enterprise

In writing the second edition of *Understanding Social Enterprise: Theory and Practice*, my co-author and I created a fine-grained approach to defining approaches to social enterprise. By examining ethical commitments to 'socialise' an enterprise's ownership and governance and/or commit an enterprise to 'social purpose', three distinguishable approaches were uncovered, each linked to their own legal forms and ethical imperatives.

A composite list of characteristics from five social enterprise 'theories in use' were compiled from previous work (Ridley-Duff & Southcombe, 2012). The list was sent to 550 social enterprise lecturers, researchers and post-graduate students. The survey instrument provided respondents with working definitions of 'socialisation' (a mutual orientation towards well-being emphasising self-help) and 'social purpose' (a philanthropic orientation towards well-being emphasising help for others). Respondents were asked to rank each social enterprise characteristic in terms of its contribution to 'socialisation' and 'social purpose'. If a characteristic contributed to both, it was ranked between other characteristics. Responses from 136 people (24.7 per cent response rate) were scored by awarding +/-2 or +/-1 based on rank. A score of 0 was awarded where an item was ranked in the middle. Based on this, Ridley-Duff and Bull (2015) argue that support exists for a theory of social enterprise based on three approaches (Table 1).

The findings provide a counter-argument to 'lowest common denominator' definitions that social enterprises 'trade for a social purpose' or have 'hybrid' characteristics (Peattie & Morley, 2008; Doherty et al., 2014). Important for understanding a new theoretical perspective is an acceptance that there are multiple pathways into social entrepreneurship, each reflecting the exchange systems within which social enterprise creation occurs (Polanyi, 2001 [1944]; Ridley-Duff & Bull, 2014). The three approaches can be summarised as:

- 1. Cooperative and Mutual Enterprises (CMEs)** that are defined by a commitment to (or innovative systems for advancing) trade through democratic/inclusive enterprises.
- 2. Social and Responsible Businesses (SRBs)** that are defined by commitments to (or technologies

Table 1 Ethical commitments in mutual, responsible and charitable trading

1. Mutual Trading in Socialised Enterprises (CMEs) Legal Forms: Cooperative, Mutual, Employee-Owned Business, other Social / Solidarity Economy Legal Forms		
Distinguishing Characteristics and Ethical Commitments	Socialisation Score	Social Purpose Score
Is (co-)owned by one or more of its primary stakeholders (workforce, customers and/or service users)	129	38
Offers membership to primary stakeholders (workforce, customers, service users)	117	43
Ensures that most (or all) of its assets are used for member, community and public benefit	139	70
Governed by one or more of its primary stakeholders (workforce, customers, service users)	121	56
Continuously encourages cooperative working / networking	112	76
Allows members to equitably contribute to, and receive distributions of, capital/surpluses	82	53
Provides technical and political education/training to its members (staff, users and elected representatives)	95	69
2. Responsible (Market) Trading in Social / Responsible Businesses (SRBs) Legal forms: Social Welfare Corp (Asia), Social / Community Enterprises (EU), B-Corps / Low-Profit Corps (US)		
Distinguishing Characteristics and Ethical Commitments	Socialisation	Social Purpose
Is not owned or controlled by a private company or public authority	87	78
States (and reviews) its ethical values and principles	76	70
Provides at least some paid employment	60	67
Provides evidence that it makes a positive social impact and/or runs for community benefit	69	83
Educates the public about the benefits of its business model	83	106
Receives most of its income from trading activities, not grants or donations	71	95
3. Charitable Trading Activities in Social Purpose Enterprises (CTAs) Foundations, Trading Charities, NGOs, Non-Profit Associations / Companies		
Distinguishing Characteristics and Ethical Commitments	Socialisation	Social Purpose
Continuously produces and/or sells goods and services to improve social/environmental well-being	67	98
Reinvests most of its surplus/profit back into its social/environmental purpose	71	104
Makes clear statements about its social and/or environmental purposes/objectives	59	97
Balances member (stakeholder) needs with sustainable development goals	44	88
Discourages a 'for-profit' mind-set by limiting the distribution of surpluses/profits for private benefit	52	114
Based on the actions of citizens voluntarily working together to meet a need	51	115
Has members/founders who bear a significant level of economic risk during venture/project creation.	56	121
Key: Socialised Enterprises = Socialisation at least 25 point more than Social Purpose Social / Responsible Businesses = Socialisation within 25 points of Social Purpose Social Purpose Enterprises = Social Purpose at least 25 points more than Socialisation		

Source: Ridley-Duff and Bull (2015), Table 2.2

for) sustainable development and the creation of 'shared value' in markets.

**3. Charitable Trading Activities (CTAs)** that are defined by commitments to produce only public benefits or deliver a public / community service.

With this framework clarified, the next section explores its usefulness and limitations through a case study of *FairShares*.

### 3. *FairShares* as a case study

According to Ridley-Duff and Bull (2013), *FairShares* can be traced back to the late 1970s. In several 'hot spots' (UK, Bangladesh, Spain, Italy) social entrepreneurs departed from 'old co-operativism' by devising inclusive approaches to auditing and ownership. The focus shifted away from solidarity in one membership group towards solidarity *between* membership groups and the local community. *FairShares* has been linked to 'solidarity cooperatives' and 'new co-operativism' (P2P Foundation, 2014; 2015) as well as policy proposals for a 'transition economy' that brings about 'systemic change' (P2P Foundation, 2015: 82; NewStart, 2015).

An exploratory case study is appropriate because a rich description can establish the usefulness (or not) of a theoretical perspective. *FairShares* is a particularly good choice because its documentation is licenced using Creative Commons (FairShares Association, 2014), and FairShares Association members give public access to their Community Forum. This means that members' deliberations and decision-making practices - the relationships between 'espoused theory' and 'theories in use' - can be more easily studied (Argyris et al., 1985; Smith, 2001).

The case has been built from postings to two Wikis. The FairShares Wiki V1.2 was closed on 1<sup>st</sup> April 2015, and has been succeeded by V2.0. Access to both have been secured. The older Wiki is available in an archive<sup>2</sup>: it contains notes, background documentation and academic papers that informed the evolution of ideas. Amongst these are interview notes from 2010 with people who influenced *antecedent* models. These findings were triangulated with current documentation (Feb 2013 – March 2015) provided by the FairShares Association through DropBox.

The case is a 'naturalistic inquiry' designed to create a credible, trustworthy, confirmable account of the development of *FairShares* (Lincoln & Guba, 1985). Naturalistic inquiry is a defensible methodology because it can accommodate the author's own participation in the FairShares Association. The findings are presented as a 'realist' ethnographic account, an interpretation of knowledge from overt participation in a culture (Van Maanen, 1998; 2011).

The truths that can be discovered during an ethnography are aligned with Kantian (1788) notions of self-realising agents who know reality (noumena) by living it, develop epistemological insights by systematically studying their experiences, and acquire transcendental knowledge by abstracting the concepts that underpin it. For this reason, the evaluation criteria for this paper are rooted in Critical Theory (Alvesson & Deetz, 2000; Alvesson & Willmott, 2003; Johnson, 2003). Positivist notions of internal validity, reliability and generalizability have to be set aside. What counts is the plausibility, authenticity and insightfulness of the account produced (Kinchloe & McClaren, 1988; Johnson et al., 2006).

Plausibility and authenticity are assessed on the basis of 'catalytic validity' (Kinchloe & McClaren, 1988). In this case, catalytic validity will be found to have occurred if espoused theories - abstract conceptualisation of *FairShares* - are observed influencing practice. Insights are developed by following Van Maanen's advice on realist ethnographic writing. He argued that a researcher can access subjective constructions of knowledge if they have sufficient experience of participating in a culture (Van Maanen, 1998; 2011). However, writing in a realist style does not equate to claiming that the knowledge produced is objective. As Van Maanen (2011) points out, the epistemology of critical ethnography is *intersubjectivity*: the researcher's account is an *interpretation* of the dialectical interplay between academic engagement and practical experience, and theoretical propositions are descriptions of knowledge co-constructed with other social actors.

Writing an ethnographic account in a realist style requires that I hide myself during the presentation of findings. This is done to encourage reflexivity through the objectification of my own interventions. I present the findings in two parts. Firstly, there is an exploration of the way antecedent social enterprise models contributed to the development of *FairShares*. The importance of these abstractions is evident in the number of times they are shared

with practitioners, students, researchers and the wider public. Secondly, I present a description of the way *FairShares* has been applied to practice by members of the FairShares Association.

I draw attention to the importance of deliberations that have taken place in two Loomio Groups – a Community Forum (referred to as the CF) and a General Assembly (referred to as the GA). The first is 'real' in the sense of containing actual deliberations amongst members of the FairShares Association as they develop their organisation. The second is 'imaginary', but based on deliberations by students making decisions in a fictional *FairShares* company. In both cases, the use of Loomio makes the study of deliberative democracy possible, and it is possible to evaluate how abstractions (espoused theories) have influenced practice.

#### 3.1 Abstract conceptualisations of *FairShares*

Four antecedents to *FairShares* were discovered by members of the FairShares Association. These were described in interview records with four practitioners who created multi-stakeholder model rules for social enterprises. The first was *Stakeholder Model Ltd* devised by Geof Cox Associates to capture the evolution of his thinking between 1984 and 2010 based on experiences in the fair trade movement. The second was the *NewCo Model* devised by Morgan Killick (at ESP Projects Ltd) with Bill Barker and Dave Thornett (from SCEDU). An interview describes how Killick studied political economy in the 1990s, then worked with SCEDU to create a legal structure for ESP Projects Ltd in 2004. This structure was copied by other enterprises in the North of England, including one of the founders of the FairShares Association. The third example was a *Surplus Sharing Social Enterprise Model* which evolved from deliberations between Gavin Boby and members of Computercraft Ltd between 1996 and 1999. Boby wrote articles with Guy Major about 'value-added sharing' and 'equity de-evaluation'. Their work shaped a spin out enterprise from Computercraft Ltd in 2001 and two subsequent social enterprise ventures before a *Surplus Sharing Model* was published by the Common Cause Foundation (in 2007). The final interview documented the rationale for the *Cooperative CIC Model* with a member of Co-operatives UK's legal team. This came about as a

response to the demands of cooperative movement members (2002 – 2007) after New Labour (UK) introduced legislation for social enterprise development.

Three of the antecedent model rules restructure a company's share capital to represent different collective interests. As such, they represent early UK attempts to develop solidarity cooperatives. Of particular interest is a finding that in the same cases, *social entrepreneurs* were protected to give them an enduring voice as 'Founders'. Unlike a private company, where control is geared to maximum exploitation of a commercial opportunity (Outsios, 2014), control in these cases was more about securing a social mission. Instruments for issuing shares were also created to make it possible to value the enterprise and calculate a share price at which members could buy an equity stake.

In line with 'new cooperativism' each model "did not necessarily have tight links to older cooperative movements [or spring from] pre-existing cooperativist sentiments" (Vieta, 2010: 2). In two cases, authors had extensive experience of cooperatives, but sought freedom from strict adherence to Rochdale Principles. Table 2 shows the capital structures they devised together with a summary of their academic and practitioner influences.

Cox's model shows the shift to multistakeholder coownership in *opposition* to Charlie Cattell who called for single-stakeholder common ownership (Table 2). Similarly, the *Cooperative CIC Model* (Community Interest Company<sup>3</sup>) shows Co-operatives UK responding to debates initiated by the New Labour government. It resisted the drift away from cooperative social enterprise by creating a CIC model under new legislation (Teasdale, 2012).

In 2007, after meeting at networking events and conferences, the authors started to converge in their thinking. The *Surplus Sharing* rules provide evidence of author interactions by citing the influence of the *NewCo* model and *Stakeholder Model* on its own development. By 2010, the *Stakeholder Model*, *NewCo Model* and *Surplus Sharing Model* all integrated at least three stakeholders (producers, consumers, social entrepreneurs and (social) investors) into ownership and governance. In 2012, these ideas started to appear in documentation describing *FairShares* (see Table 3).

Table 2 Direct Influences on the Antecedents of FairShares

Model	Practitioner influences cited	Theoretical influences cited
Stakeholder Model Ltd offers: - Stewardship Shares (trusteeship) - Partner Shares (workers/users) - Investor Shares (supporters)	<ul style="list-style-type: none"> <li>• Kermase Food Cooperative / Fair Trade Movement - 1980s.</li> <li>• New Labour debates about the retention of 'Clause 4' and common ownership - mid 1990s</li> <li>• Renewable Energy Corporation Ltd - 2000 onwards</li> <li>• Lippy People (David Tomalin)</li> <li>• North East Music Co-operative Ltd</li> </ul>	<ul style="list-style-type: none"> <li>• Cooperative journals. - 1980s/90s.</li> <li>• 'What next for IR?' by Paul Golan and Anthony Jensen - 1990s</li> <li>• (opposition to) Charlie Cattell's single stakeholder / common ownership model - 1990s.</li> </ul>
NewCo Model devised to offer: - A Shares (entrepreneurs) - B Shares (clients/customers) - C Shares (employees) - Social Equity (supporters)	<ul style="list-style-type: none"> <li>• Sheffield Community Economic Development Unit (Bill Barker / Dave Thornett) – 2002 - 3</li> <li>• ESP Projects Ltd – 2004</li> </ul>	<ul style="list-style-type: none"> <li>• Readings on 'political economy', particularly <i>The Great Transformation</i> by Polanyi - 1990s.</li> </ul>
Surplus Sharing Model devised to offer: - Founder Shares (entrepreneurs) - Labour Shares (workers) - Investor Shares (workers/others)	<ul style="list-style-type: none"> <li>• Democratic Business Ltd (Gavin Boby) – 1999 - 2001</li> <li>• Sheffield Co-operative Development Group (Alan Dootson) - 2001</li> <li>• Employee Ownership Association (under David Erdal) – 1999</li> <li>• School Trends Ltd (Peter Beeby and Rick Norris) – 2002 - 2005</li> <li>• Mondragon Corporation (field visit) - 2003</li> <li>• Dr Poonam Thapa – 2006</li> </ul>	<ul style="list-style-type: none"> <li>• Cooperative and Social Enterprise Journals - 1996 onwards.</li> <li>• Major and Boby's writings - 1996 – 2000.</li> <li>• David Ellerman - 1997</li> <li>• Conference paper by Coad and Cullen - <i>The Community Company Model</i> - 2001.</li> </ul>
Co-operative CIC Model devised to 'consult': - Employees, Funders - Suppliers, Customers - Community Representatives	Co-operative Legal Services Cooperative movement members Labour Government - 1997 – 2003. Society Law (IPS) Member consultations - 2003 – 2007.	Rochdale Principles ICA Cooperative Values and Principles - 1995 – 2005.

Source: Author's analysis

Whilst the Table 3 shows how the interests of each stakeholder group are accommodated, a simplified diagram (Figure 2) was commonly used to communicate it (on websites, a Wiki, printed guides, magazine articles, papers and conference presentations). This abstraction emphasised historical links between consumer co-operation and User Shares, between worker-co-operation and Labour Shares, and between social entrepreneurs and Founder Shares. Each follows the social economy norm of having a 'par value' (with voice and dividend rights). A fourth share type (Investor Shares) captures the rising and falling value of capital purchased and created by primary stakeholders.

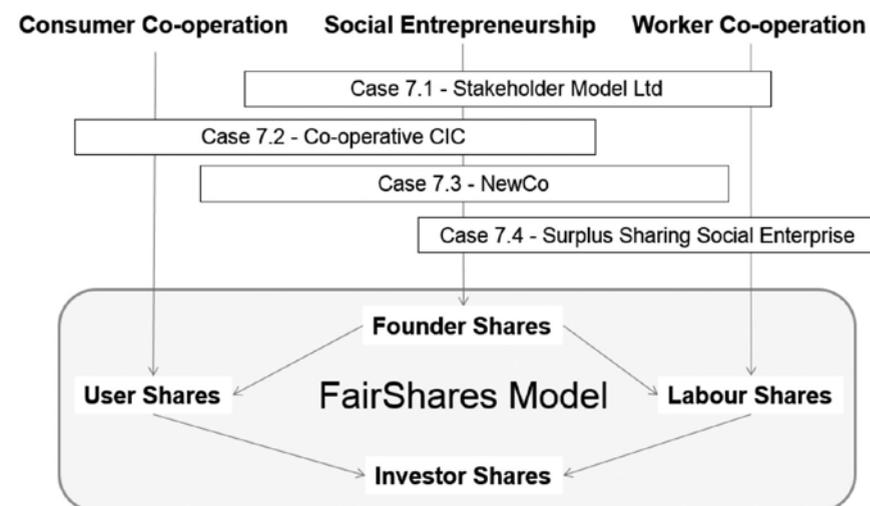
Investor Shares can be allocated in three circumstances: when producers and consumers invest resources; when they create financial capital by trading profitably with each other; when they forego dividends on their par value Labour / User Shares. Subject to member approval, Investor Shares can also be issued to third-parties who provide (social) investments and to organisations created by members for employee, community and public benefit (see Model Articles of Association, Clause 10).

Table 3 The Impact of Antecedent Models on FairShares

Approach in Antecedent Models (1980s - 2012)	Approach in FairShares (2012 onwards)
Stewardship / Class A / Founder Shares	Founder Shares
Partnership / Class B Shares	User Shares
Partnership / Class C Shares / Labour Shares	Labour Shares
Investor / Class A Shares	Investor Shares
Co-ownership (individual / organisational members)	Founder, user and labour shareholders acquire investor shares based on active participation.
At least three classes of shareholder (stakeholder) at incorporation.	1 class at incorporation (founders), with constitutional provisions to create the other classes when production, trading and surplus generation occurs.
Preference for unitary boards elected from each class of shareholder	Main/sub boards elected by shareholder classes (elections triggered by a member threshold fixed at incorporation).
All stakeholders have a route to membership Limited protection of minorities	All stakeholders have a route to membership, plus explicit protection of minority interests (special resolutions) and mediation to resolve member conflicts.
Electoral college in general meetings (Stakeholder) Employees hold the balance of power (NewCo) Shareholder classes with the same rights in general meetings (Surplus Sharing)	One member, one vote for ordinary and special resolutions; electoral college when a poll is called; one class, one vote for special resolutions. For a special resolution to pass, there must be majority support in every class of shareholder.

Source: Author's analysis

Figure 2 Representing links between Antecedent Models and FairShares



Source: Presentation to Chelmsford Ideas Festival, Anglia Ruskin University, 31<sup>st</sup> October 2013

From July 2014, three implementations of these ideas (under association, cooperative and company law) became available to members (FairShares Association, 2014). This marks a departure from *FairShares* V1.2 following discussion with Les Huckfield of Senscot and members of Unison (a trade union). In both cases, practitioners wanted a stronger asset lock when engaged in public service delivery. The result (in V2.0) was three model constitutions that reflect the approaches to social enterprise described in Table 1.

In the next section, two web-forums created by the FairShares Association are described. This provides evidence that abstract conceptualisations of *FairShares* have been applied to social enterprise development and education. Both forums were created using Loomio – OpenSource software for collaborative decision-making designed by Occupy Movement activists (Jenson, n.d.). The first forum (“FairShares Association” – hereafter called FM)<sup>4</sup> is used by its members to make decisions about the development of their association. The second forum (“FairShares Model Enterprise” – hereafter called FME)<sup>5</sup> supports learning and teaching in universities. Both web-forums contain records of actual decision-making, so they provide empirical records of the application of *FairShares*.

### 3.2 FairShares in practice

The FME on Loomio was both similar and different to FA. FME contained six sub-groups whilst FA contained only three (Figure 3). Secondly, FME described its sub-groups differently by including the word ‘Shareholder’ in sub-group descriptions. These changes reflected the evolution of *FairShares* from a single model constitution under company law (V1.2) to three model constitutions under association, cooperative and company law (V2.0)<sup>6</sup>.

In both cases, founder, labour and user members were allocated to distinct sub-groups, clearly following abstract conceptualisations of *FairShares*. Only FME fully implemented the model constitution, including additional sub-groups for Auditors, Directors and Investors. As FA does not issue shares, no Investors group existed. Furthermore, the reason there was no Audit group for FA was youth rather than policy. The constitution requires

an Auditors group only after membership exceeds 50. For the same reason, FA had no need to separate Directors from Founders at the time: separation will occur when membership reaches 50.

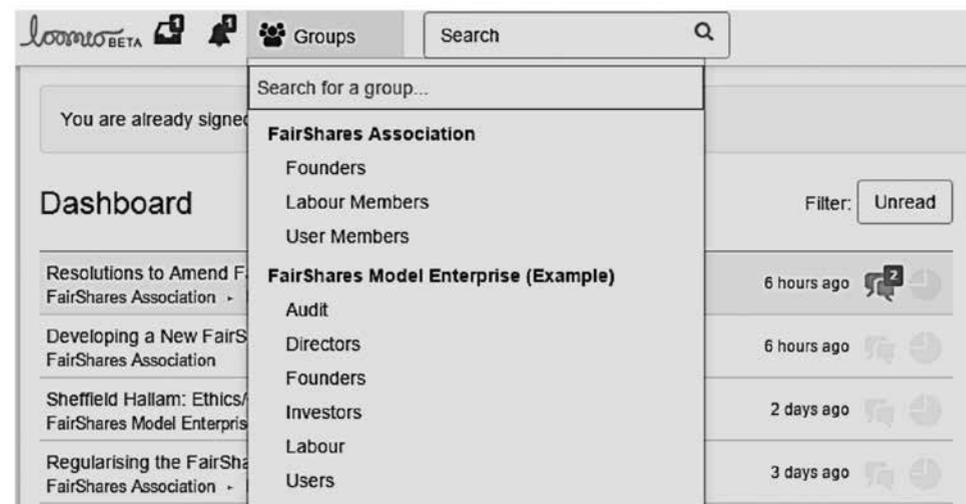
Insights about practice can be developed from this. Early in the life of a *FairShares* enterprise, only a Founders group and/or Community Forum needs to be created. Once activities begin, a Labour group is created, and finally when users start benefitting from (or customers start buying) products and services created by Labour, a Users group is created. As stakeholders become more integrated, sub-groups for Investors, Directors, Auditors can be established as per the constitution.

In FA, the initial group joined was ‘Community Forum’ (hereafter called CF). In FME, the initial group was the General Assembly (GA). The CF (in FA) contained non-members – it linked ‘supporters’ (who took an interest and provided support) to ‘members’ (who built *FairShares* or used it in their work). The CF could be joined by anyone, whereas an application was needed to approve Labour and User Members. In FME, the GA was described as the meeting place for all members. Sub-groups existed for each member type to vote on issues pertaining to their own development, but there was only minimal activity found.

The choice of Loomio is itself interesting as it supports *only* one-person, one-vote decision-making (and not one share, one vote). Every member could make proposals, and agree, abstain, disagree or block others’ proposals. The sub-group capability of Loomio supports provisions in a *FairShares* constitution for special resolutions (which require a majority in each stakeholder group, plus 75% in favour). In reviewing the two examples, however, no evidence of passing special resolutions was found. There were, however, examples in FA of sub-groups voting separately from the CF. In FME, there was evidence of deliberations in sub-groups, and voting in the GA (Figure 4).

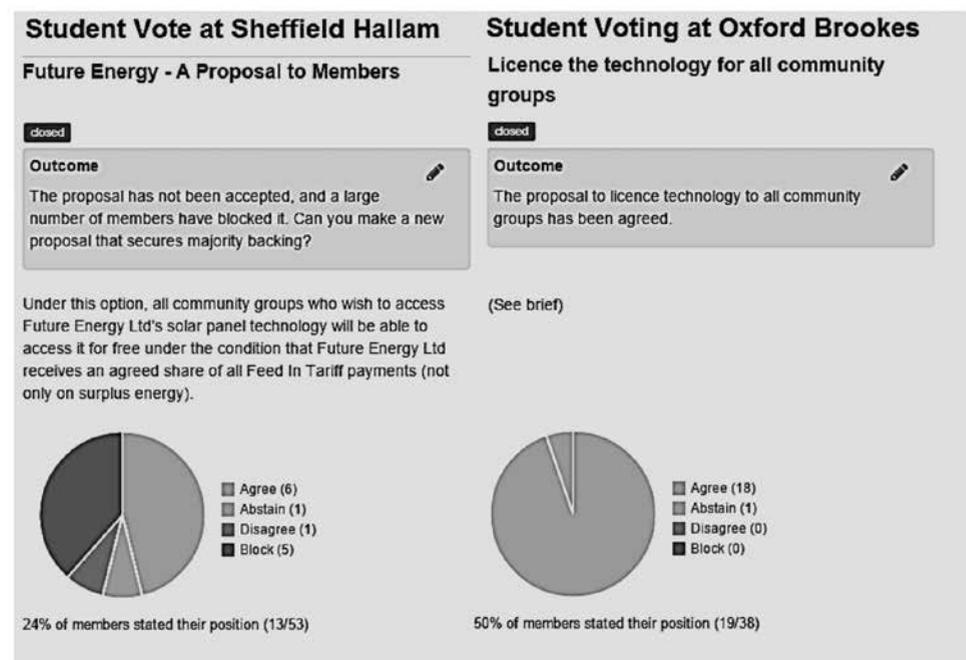
However, *in practice*, FA was operating – for some decisions - as if those who had joined the CF were members. The CF had given voting powers to both members and non-members. Decisions on marketing straplines, book publishing and website design had been taken on a one-person, one-vote basis in the CF. Votes on constitutional changes were restricted to Founder and Labour sub-groups.

Figure 3 Stakeholder groups in two implementations of FairShares



Source: Author's 'Dashboard' on Loomio, Available at: www.loomio.org (Accessed on: April 25, 2015)

Figure 4 General Assembly decisions made by students who were role-playing Founders, Employees, Customers and Investors in a FairShares company



Sources: Available at: <https://www.loomio.org/d/fPszx7cO/sheffield-hallam-ethics-csr-discussion>, and <https://www.loomio.org/d/bmtZyN7S/oxford-brookes-changed-proposal> (Accessed on: April 25, 2015)

Although a User Members sub-group existed, it was empty. A process for applying had been circulated, but it planned to implement this only when the constitution had been registered with the relevant authorities. At the time of writing, lists of potential Users had been drawn up so they could be invited to apply for membership.

The final item of empirical evidence was the constitution of FA (see Appendix A). This was finalised on 17<sup>th</sup> April 2015, 30 months after the first discussion document on *FairShares* was published. It provided evidence of its impact on FA members, and the values and social objects committed to in law. The objects were divided into two sets: clauses 5a – 5f described commitments to improve the well-being of members through social entrepreneurship, cooperative values and non-discriminatory management practices (the constitution committed members to eliminating discrimination based on “social class, race, ethnic origin, gender, sexual preference, age, disability and religion”). The second set of objects (clauses 5g–j) related to the FA’s commitment to *FairShares*. Clause 5g committed members to

“...protect, develop and promote the *FairShares* Model for use by associations, companies, cooperatives, consultants and educators who are committed to Brand Principles defined by members of the association”.

Clauses 5h-j indicated the mechanisms by which this would be done: support for accounting, auditing, education, training, investment, membership and public engagement that promotes knowledge sharing amongst members and the public. In short, clauses 5(a-f) described values while 5(g-j) described products, services and actions to support them. Given the reference to ‘Brand Principles’, it matters what these are. Using a Google search for “FairShares Brand Values and Principles”, both a document (Ridley-Duff & Southcombe, 2014) and a Wiki (FairShares Association, 2015) describing them were found. They were specified as:

- wealth and power sharing with primary stakeholders;
- ethical review of the choice of goods/services offered;
- ethical review of production and retailing processes;
- specification of social purpose(s) and auditing of social impact(s);

- a social democratic model for the ownership, governance and management of capital

In addition, there were auditing questions to establish how a *FairShares* enterprise implements its brand principles (see Appendix B). For example, questions about purpose and impact were directed to Founder Members. Questions about the ethics of production were directed to Labour Members, and the ethics of selling and consuming product/services were established with User Members. Questions about the governance system and its role in the distribution of wealth and power were matters for *all* members.

#### 4. The Ethics of FairShares

As I have now finished the presentation of abstract and practical examples of *FairShares*, I can become ‘visible’ again by turning to an analysis and discussion of the findings. In this section, I discuss the case study using the conceptual framework developed in Table 1 to evaluate whether – and to what extent – *FairShares* makes ethical commitments that align with the characteristics of CMEs, SRBs and CTAs (Table 4).

##### 4.1 Support for Mutual Trading (in CMEs)

All model constitutions for *FairShares* (association, cooperative and company) made commitments to engage in trading for mutual benefit, and to improve economic, social and environmental outcomes for members. In both abstract and practical implementations (model Articles as well as actually existing Articles), Clause 5a made a commitment to trade “to improve the well-being of [the enterprise’s] primary stakeholders (producers, employees, customers and service users)”.

It is the goal of improving the well-being of both ‘internal’ members (employees, producers) and external members (customers, service users) that defines *FairShares* as a solidarity cooperative (Lund, 2011). Moreover, the stated commitment to economic, social and environmental impact defines *FairShares* as a framework for responsible business (Laasch & Conway, 2015).

The level of match between the distinguishing characteristics of a CME and *FairShares* is strongest in the cooperative and share company versions. In the association version, members can contribute capital but not receive dividends. In all cases, stakeholders have control of surplus capital (according to percentages agreed in the constitution). In the association version this is placed in restricted accounts for Labour and User members to allocate to social projects. The cooperative and company versions pay out dividends to Labour, Users and Investors so - from a philanthropic perspective – this would be seen as *primarily* benefitting members.

However, I strongly challenge this assumption. Evidence from the UK, Italy and Spain repeatedly finds that *equitable* distributions of wealth to a large number of worker and consumer owners is not only compatible with business success (Birchall, 2009), but also provides community and public benefits: 1) it increases the quantity and quality of social capital (Putnam et al., 1993); 2) it improves health and life-expectancy across the community (Erdal, 2014); 3) it improves the capabilities of individuals and the quality of the relationships they can develop (Lewis, 1954; Restakis, 2010; Novkovic & Webb, 2014) and; 4) the density of co-operative development is linked to the elimination of poverty from the community (Long Island University, 2000; Ridley-Duff & Hurst, 2014). Community and public benefits, therefore, are not in opposition to member benefits in CMEs (unlike private companies where owners are a legally *separated* from employees and customers who have no right of membership). Where CMEs lock-in large scale distributions to members, it lowers the cost of public administration (Wilkinson & Pickett, 2010; Erdal, 2014). Private firms who exploit workers (through low pay policies and minimal welfare provision) increase the costs of public administration.

##### 4.2 Support for Responsible Trading (in SRBs)

*FairShares* is silent on the balance between trading and grant income. However, every example examined (both abstract and real) there were commitments to responsible trading (Clauses 5 and 47). However, as social auditing is not a requirement until membership reaches a threshold, it was too early for formal social auditing to be found. In the

‘real’ example (FA), the member threshold is set at 50. Whilst formalised social auditing was not found, the *practice* of including both non-members and members in decisions on branding and product development indicates that multi-stakeholder engagement is already a regular occurrence. Given this, what would a social audit achieve? As social audits are framed as a process for initiating and sustaining stakeholder engagement in governance (Spreckley, 2008; Pearce & Kay, 2008), would it add anything if an inclusive governance system is already the norm?

Nevertheless, the Audit group in FME (evidenced by the model constitution) has *additional* responsibilities. These include: 1) checking the quality of information given to members, and; 2) ensuring that elections to governing bodies follow the procedures in the constitution. Removing power from an executive group to organise elections and giving elected members the power to audit information quality is found in highly successful cooperatives and mutuals (Lewis, 1954; Whyte & Whyte, 1991; Forcadell, 2005; Cathcart, 2013). Whilst I found no empirical evidence this was occurring yet, the inclusion of these responsibilities in a ‘real’ Articles of Association suggests that the practices will begin when enterprises reach a medium-sized (> 50 members). Moreover, part of Article 47 - which describes how social audits are undertaken - embeds environmental auditing:

“an assessment of the [enterprise’s] activities externally, including effects on people, the environment and other organisations”

##### 4.3 Support for Charitable Trading Activities (CTAs)

*FairShares* is a partial fit against the characteristics for CTAs in its cooperative and share company versions, and a full match in its association version. In FA, there was a full match against CTA characteristics because it committed members to reinvesting all surpluses into its objects and to only distributing surpluses (or disposing of assets) for community and public benefit. Both cooperative and company versions permitted up to 70% of surpluses to be distributed, but in both cases this 70% is sub-divided into allocations of 35% to Labour and User Members, with the remaining 30% for Investor Members.

Table 4 Ethical commitments in abstract and practical examples of FairShares

	Abstract Models			Practice Examples	
	Co-op	Company	Association	FA	FME
<b>Mutual Trading (CMEs)</b>					
Co-owned by one or more of its primary stakeholders	Yes	Yes	No	No	Yes
Offers membership to primary stakeholders	Yes	Yes	Yes	Yes	Yes
Ensures that most (or all) of its assets are used for member, community and public benefit	All three	All three	Community and Public	Community and Public	All three
Governed by one or more of its primary stakeholders	Yes	Yes	Yes	Yes	Yes
Continuously encourages cooperative working / networking	Yes	Yes	Yes	Yes	Yes
Allows members to equitably contribute to, and receive distributions of, capital/surpluses	Yes	Yes	Contribute only	Contribute only	Yes
Provides technical and political education/training to its members	Yes	Yes	Yes	Yes	Yes
<b>Responsible Trading (SRBs)</b>	<b>Co-op</b>	<b>Company</b>	<b>Association</b>	<b>FA</b>	<b>FME</b>
Not controlled by private / public sectors	Yes	Yes	Yes	Yes	Yes
States (and reviews) its ethical values and principles	Social Audit included	Social Audit Included	Social Audit Included	Yes	Recognised
Provides at least some paid employment	Trading is an objective	Trading is an objective	Trading is an objective	Trading is occurring	Trading discussed
Provides evidence that it makes a positive social impact and/or runs for community benefit	Social audit and mutual principles	Social audit and mutual principles	Social audit and mutual principles	Constitutional commitment	Actively discussed
Educates the public about the benefits of its business model	Yes	Yes	Yes	Yes – actively	Yes
Receives most of its income from trading activities, not grants or donations	Member determined	Member determined	Member determined	Not yet	N/A
<b>Charitable Trading (CTAs)</b>	<b>Co-op</b>	<b>Company</b>	<b>Association</b>	<b>FA</b>	<b>FME</b>
Continuously produces and/or sells goods and services to improve well-being	Specified object	Specified object	Specified object	Specified object	Actively discussed
Reinvests most of its surplus/profit back into its social/environmental purpose	70 – 100%	70 – 100%	100%	100%	Not specified
Makes clear statements about its social and/or environmental purposes/objectives	Yes	Yes	Yes	Yes	Actively discussed
Balances member (stakeholder) needs with sustainable development goals	Yes	Yes	More on sustainability	More on sustainability	Yes
Discourages a 'for-profit' mind-set	Partial	Partial	Yes	Yes	Partial
Based on the actions of citizens voluntarily working together	Yes	Yes	Yes	Yes	Yes
Has members/founders who bear a significant level of risk	N/A	N/A	N/A	Yes	N/A

Source: Author's analysis

For example, if a post-tax surplus of £100k exists, only £70k would be distributable. This £70k would be divided as follows: £24.5k to Labour Members, £24.5k to User Members and £21k to Investor Members<sup>7</sup>. This prevents the cooperative and share company versions from becoming 'charitable' in the legal sense of the term.

However, in the association version, allocations of surpluses are directed into social objects (by putting the capital into restricted accounts controlled by individual Labour Members, User Members and the Trustee Board). This marries the logic of mutuality with the practices of philanthropy through a process to devolve budget spending powers to stakeholder groups. Clause 41 describes how elected Labour and User Board members are given powers to convene meetings to define projects with Labour and User Members.

A summary of the findings is provided in Table 4. In the final section of the paper, I review the implications and set out conclusions on the ethics of *FairShares*.

### 5. Implications for the future of social enterprise development

The analysis of *FairShares* provides an answer to the research question. The brand principles (Appendix B) place an emphasis on: defining social purposes and having a social impact; applying ethics to the choice of production and consumption practices; and democratising ownership, governance and management to prevent both the 'privatisation' and 'nationalisation' of profits and assets (Ridley-Duff, 2012). This ethical framework is itself derived from a definition of social enterprise prepared by Social Enterprise Europe Ltd (FairShares Association, 2015).

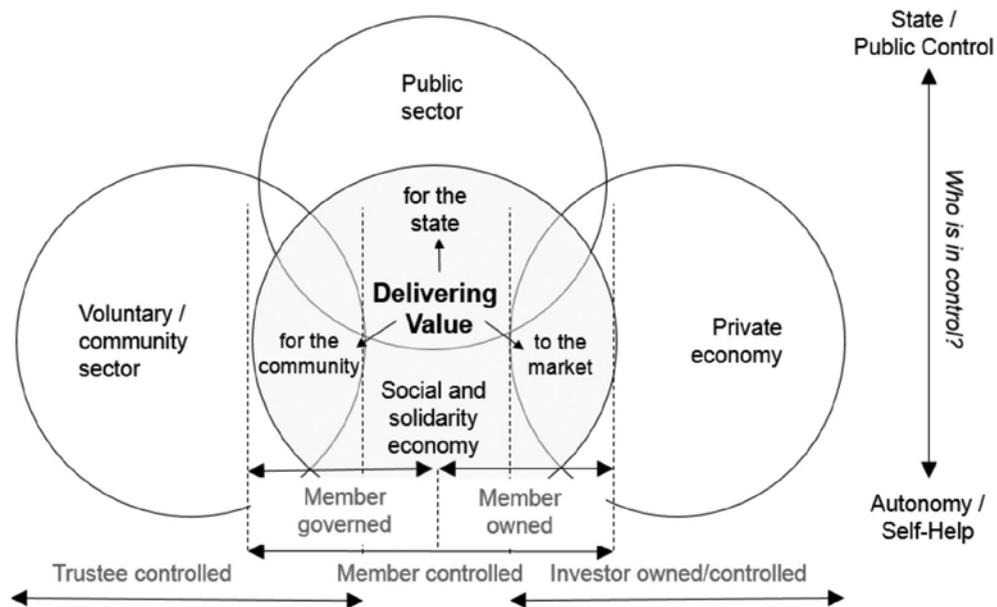
Whilst the cooperative and share company versions match the ethical and legal commitments of CMEs and SRBs, they provide only a partial match against CTAs. In contrast, the association version fulfils the ethical and legal commitments of CTAs and SRBs, but is a partial match against CMEs. This is because association law normally prevents the distribution of surpluses to members, and requires 100% of surpluses to be reinvested in community / public benefits.

However, such a set of conclusions overlooks that every version of *FairShares* (both abstract conceptualisations and practice examples) fulfils the majority of ethical and legal commitments across all three approaches. Whilst specific versions offer opportunities to satisfy regulators, the value of *FairShares* is – perhaps – that it sets a standard for a fourth approach to social enterprise. As Nyssens (2006) has claimed, social enterprise can sit at the 'crossroads' of market, state and civil society. The evidence points to *FairShares* acting as a vehicle for propagating this design principle across multiple legal forms.

The commitment to member-control (and ownership in the cooperative and company versions) comes across strongly. This appears in every version through commitments to create a multi-stakeholder enterprise (solidarity cooperative) for *shared benefit*. In all versions, decisions are made on a one-person, one-vote basis supported by cooperative governance. One-person, one-vote is practised not only across all membership groups (in the CF and GA) but also within each stakeholder group.

For this reason, I return to the works of Westall (2001) and Ridley-Duff (2002) who made bold arguments for member-ownership and *multi-stakeholder* ownership and governance prior to New Labour's consultation and legislation on Community Interest Companies (CICs) in the UK (Ridley-Duff & Bull, 2015). *FairShares* captures that part of the social enterprise movement that makes ethical and legal commitments to maximise *coownership* through 'associative entrepreneurship' amongst founder members who then create 'associative democracies' that enfranchise consumers and producers (Scott-Cato et al., 2008; Smith & Teasdale, 2012). This ethical and legal position is different to charity (where personal sacrifices are made for a beneficiary group) (Morgan, 2008), different from the ethics of traditional cooperatives (where benefits go to people who share a common bond) (Parnell, 2011), and different to enlightened shareholder value (where the hegemony of investors is protected) (Porter & Kramer, 2011). Commitments to shared ownership and shared benefits puts *FairShares* at the heart of a fourth approach to social enterprise (Figure 5), based on autonomous member-controlled and member-owned enterprises committed to sharing power and benefits. It embraces values in the social and solidarity economy through a commitment to 'new cooperativism' (Vieta, 2010; Lund, 2011).

**Figure 5** FairShares as a fourth approach to social enterprise: autonomous member-owned solidarity cooperatives that create social value



Source: Ridley-Duff and Bull (2015), Figure 1.5.

This research is limited by the availability of real life examples so action research programmes will be needed to stimulate and follow *FairShares* enterprises as they develop<sup>8</sup>. No generalizable conclusions can be made from a single case study, but there is evidence that the transition from 'espoused theory' to 'theory-in-use' has been evidenced (Argyris et al., 1985; Johnson et al., 2006). Moreover, the 'catalytic validity' of *FairShares* has been empirically tested using technologies created by activists in the Occupy Movement.

I tentatively suggest an additional, potentially important, finding. The transition into practice created an enterprise culture that was more inclusive than its antecedents and prior abstract conceptualisations. The Community Forum in FA gave voting powers to the wider community as well its Founder and Labour members for decisions about

product and service development. This makes it similar to Open Coops in which the boundary between members and wider community becomes permeable (Davies-Coates, 2014). It also opens up some intriguing research possibilities. Firstly, could the application of *FairShares* integrate workplace democracy (in organisations) with political democracy (in the community)? The findings from subsequent research can test Yeo's (2002) critique of Sidney and Beatrice Webb. Yeo took the view that the fragmentation of the identities of working people (by separating them into political parties, trade unions and cooperative societies) was a mistake. Solidarity cooperatives using OpenSource technologies make the re-integration of these identities a tantalising possibility. Studies that use *FairShares* as a theoretical lens, or a guide to practice, can yield new knowledge about the processes of 'associative entrepreneurship' and the creation of 'associative democracies' within the social economy.

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**(ENDNOTES)**

- 1 See [www.fairshares.coop](http://www.fairshares.coop).
- 2 Now stored at <http://www.fairshares.coop/wikispotarchive/fairshares.v1-2archive.xml>
- 3 See <http://www.cicregulator.gov.uk/cicregulator/about-us> for further information on CICs.
- 4 This is accessible at: <https://www.loomio.org/g/9asOJB5F/fairshares-association>
- 5 This is accessible at: <https://www.loomio.org/g/uglCXanW/fairshares-model-enterprise-example>
- 6 See: [http://www.fairshares.coop/wiki/index.php?title=What%27s\\_New\\_in\\_V2.0%3F](http://www.fairshares.coop/wiki/index.php?title=What%27s_New_in_V2.0%3F)
- 7 These percentages are set at incorporation and can be changed by special resolution. In a proposed application of FairShares at Massmosaic (a crowdsourcing project), the initial percentages will be 40% investors, 25% Labour, 25% Users and 10% to Founders.
- 8 This indicates that there will be international crowdsourcing, national health-care and social economy support projects, community broadband projects, and educational projects within the next 12 months.

**Appendix A**  
**– Objects of the FairShares Association**

Taken from the Articles of Association agreed on 17<sup>th</sup> April 2015 by 10 Labour Members of the FairShares Association.

5	<p>The Association's objects are:</p> <ul style="list-style-type: none"> <li>• to engage in activities that improve the well-being of the Association's primary stakeholders (producers, employees, customers and service users);</li> <li>• to pursue trading activities that are economically, socially and environmentally sustainable, and which improve the well-being of the Association's primary stakeholders;</li> <li>• to promote the development of social entrepreneurship;</li> <li>• to advance Co-operative Values and Principles that create social capital through participatory management and democratic governance processes;</li> <li>• to abide by the internationally recognised values and principles of co-operative identity as defined by the International Cooperative Alliance, in particular the values of self-help, self-responsibility, democracy, equality and solidarity and the ethical values of honesty, openness, social responsibility and caring for others;</li> <li>• to abide by principles of equality of opportunity and oppose forms of discrimination on the grounds of social class, race, ethnic origin, gender, sexual preference, age, disability and religion;</li> <li>• to protect, develop and promote the FairShares Model for use by associations, companies, cooperatives, consultants and educators who are committed to Brand Principles defined by members of the association.</li> <li>• to provide accounting, auditing, education, training and investment support to FairShares associations, companies, co-operatives, consultants and educators.</li> <li>• to operate a subscription scheme for supporters of FairShares associations, companies, cooperatives, consultants and educators to fund knowledge sharing, debate and development of the FairShares Brand and Model.</li> <li>• to make the public aware of FairShares associations, companies, co-operatives, consultants and educators to facilitate knowledge sharing, debate and development of the FairShares Brand and Model.</li> </ul>
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**Appendix B – Auditing the FairShares Brand**

The FairShares Wiki (on 17<sup>th</sup> April 2015) contained the following information.

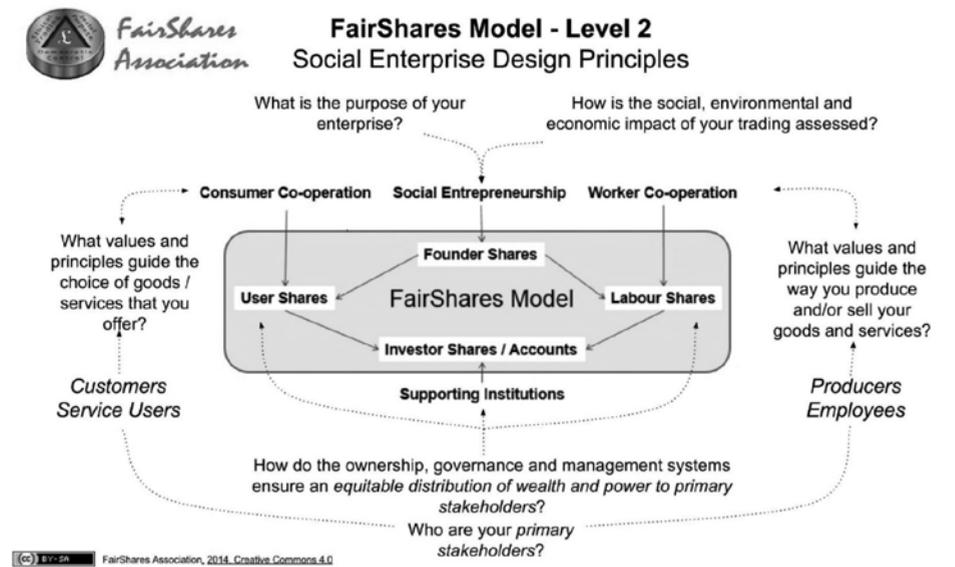
**Brand Value and Auditing**

To use this brand, a FairShares Company / FairShares Co-operative should have convincing answers to the following six questions during a social audit:

1. Who are your enterprise's primary stakeholders?
2. What is the purpose of your enterprise?

3. How is the social, environmental and economic impact of your enterprise assessed?
4. What values and principles guide the choice of goods/services that you offer?
5. What values and principles guide the way you produce and/or sell those goods and services?
6. How do the ownership, governance and management systems ensure equitable distributions of wealth and power to primary stakeholders?

These are linked to the abstract model presented in Figure 2 of this paper indicating how the auditing process can support a multi-stakeholder (solidarity) approach to co-operative ownership, governance and management.



Source: Available at: [http://www.fairshares.coop/wiki/index.php?title=FairShares\\_Model](http://www.fairshares.coop/wiki/index.php?title=FairShares_Model) (Accessed on: April 17, 2015)

Rory James Ridley-Duff

## **FAIRSHARES MODEL: ETIČAN PRISTUP RAZVOJU SOCIJALNOG PODUZETNIŠTVA?**

### **SAŽETAK**

Ovaj je rad nastao na temelju uvodnog predavanja na 14. kongresu Međunarodne asocijacije za marketing u neprofitnom i javnom sektoru (IAPNM). Rad se bavi pitanjem „Kakav utjecaj imaju etičke vrijednosti u FairShares modelu na socijalno poduzetničko ponašanje?“ U prvome se dijelu prikazuju tri široka pristupa socijalnom poduzetništvu: zadruge i uzajamna društva (CMEs), socijalna i društveno odgovorna društva (SRBs) i dobrotvorne trgovačke aktivnosti (CTAs). Daje se pregled etičkih načela svakoga od ovih pristupa kako bi se definirao konceptualni okvir za ispitivanje FairShares modela kao studije slučaja. U drugome dijelu, rezultati se analiziraju u odnosu na etičke vrijednosti i načela koja dolaze do izražaja kad se FairShares primjenjuje u praksi. Rad doprinosi proširenju spoznaja tako što pokazuje primjer upotrebe OpenSource tehnologije (Loomio) koja je poslužila da se 'zagovarane teorije' prenesu u 'teorije u upotrebi', sve u cilju razvoja socijalnog poduzetništva. Ispitivanje FairShares modela uz pomoć konceptualnog modela pokazuje da bi mogao postojati i četvrti pristup koji bi se temeljio na suradnji više različitih dionika kako bi se ostvarila 'asocijativna demokracija' na radnom mjestu.

**Ključne riječi:** socijalno tržišno gospodarstvo, etika, solidarnost, socijalno poduzetništvo, suradnja, uzajamnost

## **PRELIMINARY COMMUNICATIONS PRETHODNA PRIOPĆENJA**

**Mario Banožić, Gabrijela Žalac, Marijana Sumpor:**

*Mapping of tourism potential: The preconditions for the development of tourism in Continental Croatia*

**Danimir Štros, Maja Coner, Daniel Bukovinski:**

*Management in rural areas*

**M. Mercedes Galán – Ladero, Clementina Galera – Casquet:**

*The role of the retailers in cause-related marketing: A reference to the Spanish case*

**Ilija Nedić:**

*Break-even point in sugar-beet production*

**Jerko Glavaš, Luka Stanić, Damir Šebo:**

*The impact of the managers' educational level on the development of the knowledge-based organizations:  
The case of insurance companies in Croatia*

**Melita Balas Rant:**

*Competing via creation of distinctive organizational competences: "How to do it"*

**Dijana Mečev, Ivana Kardum Goleš:**

*Primary healthcare service quality measurement: SERVQUAL scale*

**Mario Banožić**  
City of Vinkovci  
Bana Jelačića 1,  
32100 Vinkovci, Croatia  
mario.banozic@gmail.com  
Phone: +38598792869

**Marijana Sumpor**  
The Institute of Economics Zagreb  
Trg Johna Kennedyja 7,  
10000 Zagreb, Croatia  
msumpor@eizg.hr  
Phone: +385915074975

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**Gabrijela Žalac**  
Vukovar-Srijem County  
A. Akšamovića 31,  
32100 Vinkovci, Croatia  
gabrijela.zalac@vk.t-com.hr  
Phone: +385989716679

# MAPPING OF TOURISM POTENTIAL: THE PRECONDITIONS FOR THE DEVELOPMENT OF TOURISM IN CONTINENTAL CROATIA

## ABSTRACT

Many Croatian scientists indicate that there are significant opportunities in tourism that can beneficially influence the overall socio-economic development of Croatia. It is recognised that Croatia has to follow more closely the contemporary tourism trends, in which much greater attention is given to ecology, the cultural identity of the destination, active vacations, service quality and selective forms of tourism development. There is also agreement that the clean sea, the coast, and the abundance of natural and cultural beauty are the advantages of Croatia's tourism supply in the maritime part of the country. However, there are some discussions that the Continental part of Croatia is also abundant in natural beauty, cultural wealth, and gastronomy, and that it has many other underutilised tourism potentials. Different viewpoints on tourism in Croatia are based on statistical indicators, such as the level of development of tourist regions expressed through investments in infrastructure, the number of employed and the direct benefit of tourism to the economy. Despite the fact that the Continental part of Croatia abounds in tourism potential, what is offered is recognised only locally. This problem has negative impacts at the strategic level, as project planning and financing need to have a regional dimension. Some authors (Kušen, 1999; Koščak, 1998; Krippendorf, 1986; Müller, 1994; Stabler, 1996; Travis et al., 1994) have developed a cadastre of tourism potential, which has never been implemented. Therefore, this paper aims to map the tourism potentials of Continental Croatia by using the triple helix model, based on which regional tourism can be developed and future project funding ensured.

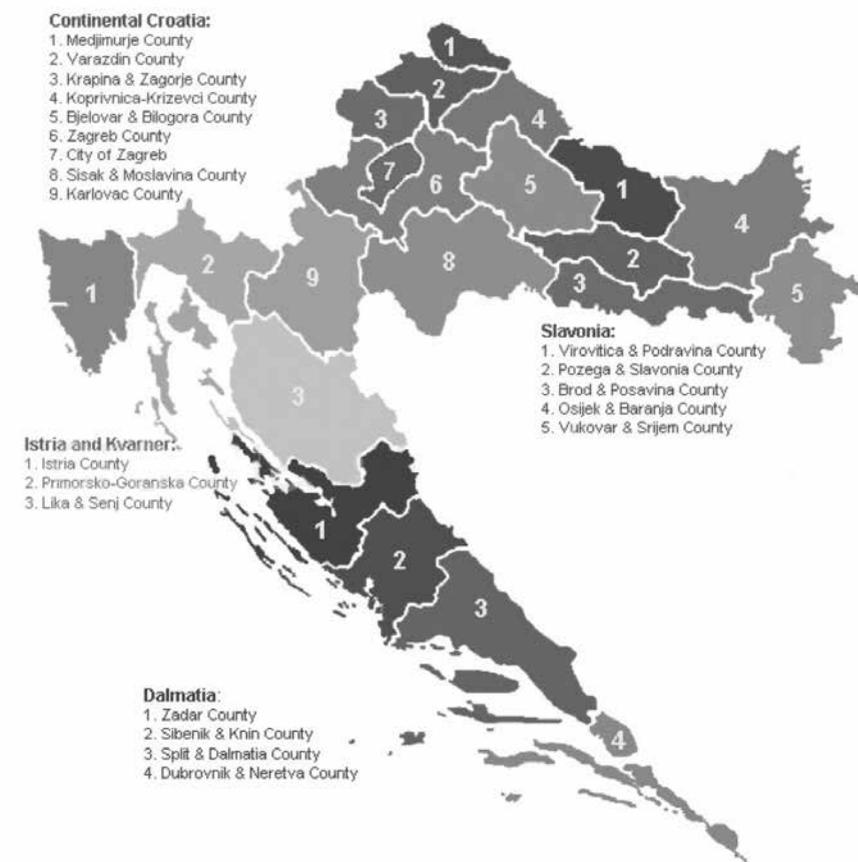
**Keywords:** Continental Croatia, tourism development, tourism potential, triple helix model

## 1. Introduction

Tourism is an important mechanism of economic development and an important generator of new working posts in many countries. Therefore, tourism has always been interesting to the governments of developing countries in their efforts to increase the economic benefit from tourism development. Tourism is also one of the most important economic branches of the Republic of Croatia, given that tourism has a 15–20% share of the national product and a share of about 12% in overall employment. Tourism, in brief, is one of the leading sectors of the Croatian economy. With almost 60 million overnight stays in 2013 and revenue of EUR 7 billion, Croatia has been recognised in the overall tourist market as an important destination whose developing potential has not been used to its maximum. Many scientists and experts (Meler and Ružić, 1999; Pirjevec and Kesar, 2002; the Institute for Tourism Zagreb, 2010) agree that the clean sea, the coast, its natural wealth and cultural heritage are advantages on which the tourist tradition of the coastal part of the country is based. However, some discussions support the thesis that there are parts of Croatia, like the Continental part, that also abound in natural beauty, cultural wealth, gastronomy and other underused tourism potentials, which represent additional competitive advantages of Croatian tourism. Different views on tourism in the Republic of Croatia come mostly from statistical indicators, the level of development in tourist regions represented by investment in infrastructure, the number of employees and the direct benefit to the economy, and a focus only on local attributes. A comparative analysis of these indicators according to administrative units in the Republic of Croatia, such as employment, investments, the structure of boarding capacities and overnight stays leads to the conclusion that the counties on the coast add greater benefit to the economy and to the competitiveness of the national economy on the tourism market. The stated area includes seven Croatian counties on the coast, as shown in Figure 1: Istria, Lika-Senj, Primorje-Gorski Kotar, Split-Dalmatia, Dubrovnik-Neretva, Šibenik-Knin and Zadar County. They comprise an area of 24,651 km<sup>2</sup>, which makes up 28.12% of the total area of the Republic of Croatia, amounting to 1,413,328 inhabitants, and, according to the available statistics, in terms of arrivals and overnight stays of domestic and foreign tourists, they make

up about 94.1% of the overall tourist turnover. According to available statistical data, it can be concluded that the total number of employees in hotels and restaurants in coastal counties amounts to 58,800, which is 70.5% of the total number of those employed in the same industry at the national level. They recorded 94.1% of the overall tourist turnover in the Republic of Croatia, i.e. each employee served approximately 920 domestic and foreign tourists of the coastal counties. Despite such a high number of overnight stays and revenues made in tourism, the share of coastal counties in the overall GDP of the Republic of Croatia makes up just 30.6% (the Croatian Bureau of Statistics, 2013). The area of Continental Croatia includes 13 Croatian counties, as shown in Figure 1 and comprises: Bjelovar-Bilogora, Brod-Posavina, Karlovac, Koprivnica-Križevci, Krapina-Zagorje, Međimurje, Osijek-Baranja, Požega-Slavonia, Sisak-Moslavina, Varaždin, Virovitica-Podravina, Vukovar-Srijem and Zagreb County, and the City of Zagreb. The stated area has a surface area of 56,594 km<sup>2</sup>, which makes up 71.88% of the total area of the Republic of Croatia, amounting to 2,871,561 inhabitants and, according to the latest available statistics, in terms of arrivals and overnight stays of domestic and foreign tourists, this constitutes about 5.6% of the overall tourist turnover. In 2012, the capital city of Zagreb benefited from 577,867 arrivals, i.e. 1,015,232 overnight stays, which represents 35.4% of the total tourist turnover in the Continental counties. Presenting the potential of the City of Zagreb as the capital city with a population of 792,875, and its own development and traffic issues, would require a separate research paper in itself. According to available statistical data, only 12,700 employees worked in the hotel and restaurant industry in Continental Croatia in 2012, which makes up only 15.2% of the total number of employees in this industry at the national level. They recorded 5.9% of the total tourism turnover of the Republic of Croatia, i.e. each employee served nearly 90 domestic and foreign tourists in the Continental counties. Such a low number of overnight stays from tourism creates a relatively low share for the Continental counties in the overall GDP of the Republic of Croatia, amounting to just 10.1% (the Croatian Bureau of Statistics, 2013).

Figure 1 Coastal and Continental counties of the Republic of Croatia



Source: Authors

## 2. Theoretical framework: Opportunities for the development of selective forms of tourism in Continental Croatia

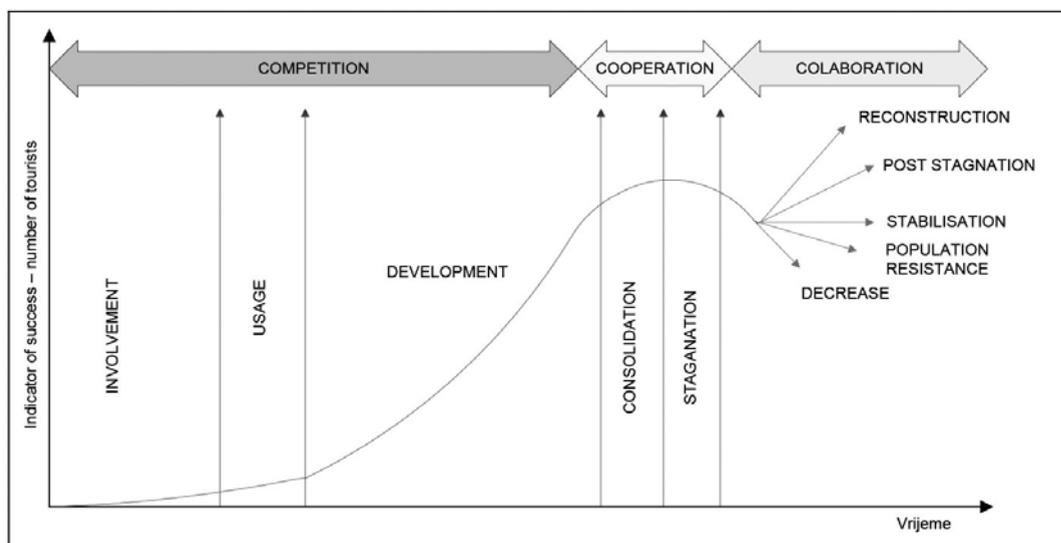
In addition, the economic crisis has led to a significant fall in the GDP in Continental counties, although according to the number of overnight stays and the employed it can be concluded that the hotel and restaurant industry has not recorded significant changes. The official statistics do not explain the number of those employed in tourism who come from Continental counties during the summer season and are part of the total number of those employed in tourism in the coastal counties. This also makes it difficult to analyse the benefit for the overall economy.

Studying individual phases of the evaluation of tourist destinations (Gilbert, 1939; Christaller, 1963; Plog, 1972; Doxey, 1975; Nornha, 1977; Stansfield, 1978; Butler, 1980; Cooper and Jackson, 1989; Debbage et al., 1990) which were successfully complemented by other authors (Tinsley and Lynch, 2001; Novelli, Smith and Spencer, 2006; Bhat and Milne, 2008), it was established that a tourist destination is a network of relations in which mutually connected tourist subjects are a key component of the tourism system and undergo an evolution through three

phases (Watkins and Bell, 2002): competitiveness, cooperation and collaboration, as shown in Figure 2.

Based on the proposed model, it can be concluded that the destination changes over time according to its marketing and development plans as well as its established operating system and tourism potentials. In addition, the destination also changes after the initial stages, when there is a strong competition among tourism entities at the national level, as well as during the consolidation stage when the cooperation among the Croatian tourism entities increases. The Republic of Croatia has a well positioned image among Mediterranean countries, but despite the mild increase in the tourist turnover, as a destination it is currently in a stagnation phase.

Figure 2 Phases of relations in tourist destination linked to the model of destination life cycle



Source: Adapted according to Butler, R. (1980), *The Concept of Tourist Area Cycle of Evaluation: Implication for Management of Resources*, Canadian Geographer, Vol. 24, pp. 5-12 and Watkins, M. and Bell, B. (2002), *The Experience of Forming Business Relationship in Tourism*, International Journal of Tourism Research, Vol. 4, No. 1, pp. 15-28.

The tourism supply of the destination can strengthen its current image and improve its market position through cooperation among tourist subjects, a new marketing and development strategy and mutual efforts of the private and public sectors. In this respect, tourist subjects of the Republic of Croatia can use their unique tourism potentials to create a new tourism supply (tangible and intangible cultural heritage, natural beauty, rivers, lakes, etc.) which the Continental counties abound in.

A new step forward in taking the tourist destination out of the stagnation phase primarily means repositioning the tourism product of the Republic of Croatia in respect of competing tourist countries, where the choice of recognisable tourist products, apart from affecting the creation of the tourist identity, will also have an important effect on the development and business policy of the tourist subjects that take part in the creation of the tourism product. Subjects in more developed areas should

therefore be complementarily tied with Continental economic resources, in order to provide tourism products which are quantitatively and qualitatively harmonised with established tourist needs, primarily those of foreign consumers. Tourist destinations which are in a stagnation phase, like the Republic of Croatia, have to enrich their supply using their tourism potentials as additional attractions, which can be done in two ways (Butler and Pearce, 1995).

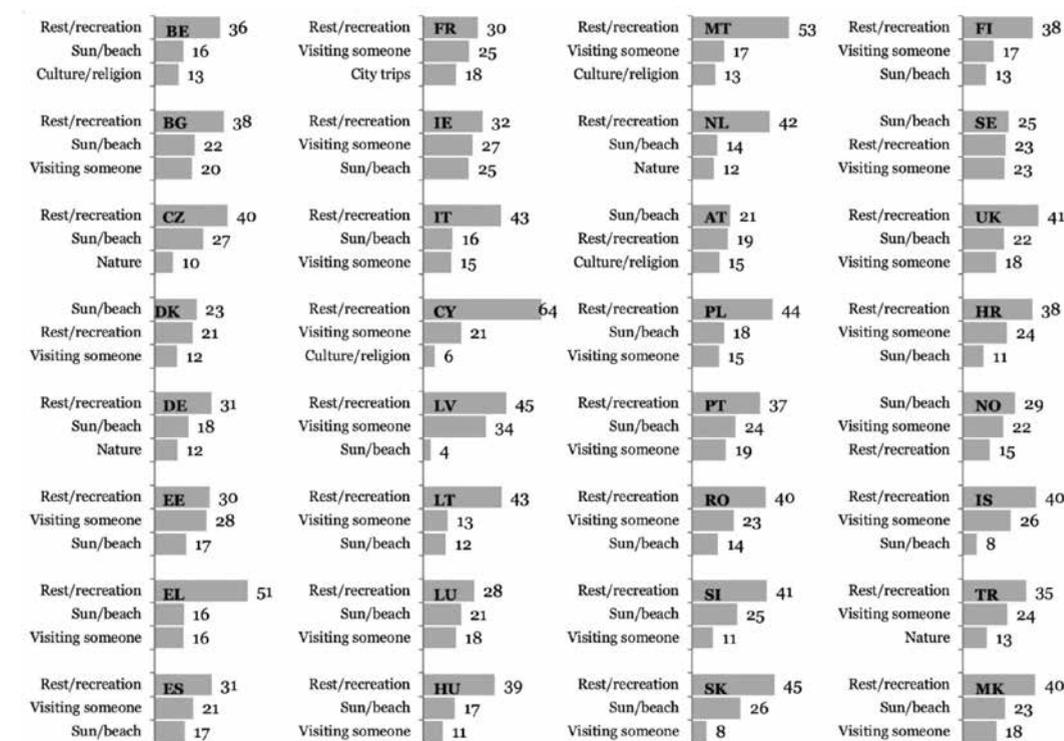
The first way leads to putting the authentic heritage (parks, forests, traditional heritage, monument heritage, architecture, rivers, lakes...) into the function of tourism. The second way is to create new, man-made attractions (theme and fun parks, memorial centres, fairs, manifestations, museums and other attractions) which, considering the tourism potential of Continental Croatia, opens up additional opportunities for the development of tourism with regard to selective tourist demand. The European Commission survey results in all European countries, shown in Figure 3, indicate that the sun and the sea are not the most important travel motives for the majority of European tourists.

Introducing the concept of specific forms of tourism does not involve the simultaneous appearance of any new form of tourism but the implementation of a new concept of the development of the tourist destination oriented towards demand and its specific needs, which is based on sustainability and a systematic approach to market research.

### 3. Methodology: Mapping the tourism potential of continental Croatia

The essence of tourism activity, as can be seen from many definitions of tourism, is the commercialising of own tourist resources, which can be found in Figure 4. Tourist resources are primarily accommodation, destination, tourist travel, etc., but from a new point of view, besides the elements named,

Figure 3 Three major motives of travel for citizens of member states and accession countries



Source: Survey on the attitudes of Europeans towards tourism, (2011), Analytical Report-Wave 3, Flash Eurobarometer 328-The Gallup Organization, Available at: [http://ec.europa.eu/public\\_opinion/flash/fl\\_328\\_en.pdf](http://ec.europa.eu/public_opinion/flash/fl_328_en.pdf) (Accessed on: August 20, 2014)

there are also other important ones that lead to the final goal, which is a visit to a destination with an attractive product.

Figure 4 Four groups of mostly accepted definitions of tourism

<b>NOMINALISATION DEFINITION OF TOURISM</b> The authors take a definition from the activity title. Most frequently it is in German and Swiss literature.	"Tourism is when a person travels and stays out of his/her usual residence and uses tourist activity there."	<b>UNIVERSAL DEFINITION OF TOURISM</b> The authors try to include in definitions other functions of tourism, health, cultural and political, etc.	"Tourism is a group of relations and features which arose during travelling and staying in a place, if this place does not understand permanent residence and is not tied to making profit."
	"Tourism is moving in space out of usual residence with the goal of meeting new things, people and their lives during temporary stay in another place."		
	"Tourism means travelling for fun, vacation, health, enjoying in nature, out of curiosity in order to see new places and people, for sports."		
<b>ECONOMY DEFINITION OF TOURISM</b> The authors explain the essence of the term tourism. Most frequently it is in American and British literature.	"Tourism can be defined as a part of a national economy which cares for tourists who visit localities outside of their residence."	<b>STATISTICAL DEFINITION OF TOURISM</b> The authors try to include the term of tourism as a feature which spreads throughout economic and social life.	"All long-term efforts to define a tourist, in order to enable statistic scope of tourist turnover (that is a number of tourist and their overnight stays) and their consumption."
	"Tourist (therefore consequently tourism) is a person who travels to a foreign country for any purpose apart from making profit and residence, and who there spends money he has made somewhere else."		
	"It can be said that tourism is a new need caused and enabled by general increase of a standard of living."		

Source: Dobre, R. (2005). *Basics of Tourism*. Šibenik: Visoka škola za turistički menadžment Šibenik, p. 23.

The efforts of tourism experts should be directed towards the development of selective tourism products, which at the moment represent only what has been described by law and definitions as inherited cultural heritage that contains our history. This might be attractive to us as it comprises an unused natural landscape, almost empty religious objects, a rural area, etc. Foreign literature points precisely to this type of narrow representation of tourist content which is mostly developed without much imagination and scientific research. This means that one should first develop a sense of imagination, play with characters, events and processes; play with the outcomes of the historical heritage, i.e. this should not be based on a theory of exclusive history, beautiful buildings or rich collections, endless scenery and appealing gastronomy. This aspect of the concept of creating an attraction can be found in literature under the title *UNIQUE (Uncommon, Novelty, Inspiring, Quality, Understanding, Emotions)*, and at the same time stands for important elements of an attractive tourist product (Schouten, 1995). In mapping, it is very important to pay attention to how the future tourism product could be developed. For example, this is important when tourists encounter local customs, culture, and historical facts, such as memorial tourism or cultural tourism. Since they

are selective forms where a tourist becomes a witness and promoter of what he sees and experiences in a tourist destination, it is very important to keep the data authentic and accurate. Otherwise, during the development of the tourism product, tourists could come to their own interpretation or gain wrong impressions.

### 3.1 Classification of existing tourist resources

In professional and scientific literature, tourist attractions do not receive the close attention which, as basic tourist resources, they deserve. In tourism, the elements that are used in the creation of a tourism product are considered as resources. Two broad types of resources are usually distinguished in literature. Those for which the necessary regulation does not exist (the sun, the wind) are limited resources. Limited resources comprise (Dietvorst and Ashworth, 1995): *physical resources* (soil, water, vegetation, energy); *work force*; *capital goods* (resources that are completely changed by human effort); *socio-cultural resources* (historical heritage, some patterns of social life, customs, tradition, arranged landscape, art, and others).

Generally, all tourist attractions are tourist resources, but not all tourist resources have to be tourist attractions. The non-selective use of the term *tourist resource* instead of *tourist attraction* is funda-

mentally correct, but it does not contribute to a systematic approach to tourist attractions because it considers that they are potential tourist attractions, which does not always have to be true, whereas the title *tourist attraction* (Dietvorst and Ashworth, 1995) is used only for real tourist attractions.

There are no generally accepted agreements or attitudes in international literature on how to classify natural resources and the types of goods and services that come from them. The terms used depending on the resources are mainly natural assets, natural capital, landscape surroundings, resource base, and generally all agree that such resources can be possible and real for tourism.

Therefore, it is necessary to give special attention to the classification of the tourist resources of Continental Croatia, as shown in Figure 5.

is impossible without a clear classification of tourist attractions.

Kušen (1999) has made a great contribution to the classification of tourist attractions, and Koščak (1998), Krippendorf (1986), Müller (1994), Stabler (1996), Travis et al. (1994) have made theirs in systematising and segmenting tourist attractions.

Most empirical research does not even bother with the question of defining the tourist destination, but simply deals with the locality where the tourist consumption happens or where it could happen. In this sense, these localities are analysed and measured with respect to the level of attractiveness, guest satisfaction, successful management of guest flows and destination management. The most frequent subject of such and similar research concerns the possibilities of the destination that could serve to take a good position on the market. What is required is its sufficient attractive power and suitable facilities for receiving guests and for their stay.

Figure 5 Appendix to functional structuring of the tourist resource base

BASIC TOURIST RESOURCES (Tourist attraction basis)	
1. Potential tourist attractions of the destination 2. Real tourist attractions of the destination	
OTHER DIRECT TOURIST RESOURCES	NON-DIRECT TOURIST RESOURCES
1. Tourist-catering objects 2. Tourist devices 3. Tourist staff 4. Tourist zones (zones of commercial tourism) 5. Tourist places 6. Tourist destinations 7. Tourist agencies 8. Tourist organisations (tourist boards etc.) 9. Tourist information and promotional material 10. System of tourist information 11. Tourist education of the local population 12. Tourist attractions of neighbouring destinations	1. Preserved environment 2. Geo-traffic location 3. Traffic connections 4. Municipal infrastructure 5. Quality of spatial organisation 6. Arrangement of buildings, external devices and green surfaces 7. Peace establishment and political stability 8. Other resources

Source: Kušen, E. (2002). *Tourist attraction basis*. Zagreb: Institut za turizam, p. 17.

As the tourist attraction is a basic foundation of every tourist development, first it has to be properly identified, recorded, systemised, evaluated and shown at the level of the tourist destination, which

A detailed division of tourist attractions can be seen in Kušen's doctoral dissertation, as an integral part of the concept of the functional classification of tourist attractions (Kušen, 1999). The original functional system of tourist attractions contains the following classification of tourist attractions:

**Table 1** Example of a blueprint of cadastre paper of tourism potential of Continental Croatia

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Number	Cipher	Type	Attraction title	Short functional description	Location	Category	Seasons	Residing-excursion features	Acceptance capacities	Broader attraction system	Tourist accessibility	Level of tourist usage	Dates of entry and amendments	Approximate value
A001	KPT-A-001-VSZ	Medieval castle	Castle complex	Castle complex in Nuštar together with park architecture, court chapel and accompanying economic objects	Nuštar	Medieval castle from the 18th c.	No	Baroque architecture, arboretum	No	Manifestations, folklore groups, old Šokac houses, old trades and crafts	Big	No		100,000,000.00

Source: Made by authors according to Kušen, E. (2003), "Functional classification of tourist attractions", *The Journal Tourism, Institute for Tourism, Zagreb, No. 4, p. 401*.

(1) geological features of the area, (2) climate, (3) water, (4) flora, (5) fauna, (6) protected natural heritage, (7) protected cultural-historical heritage, (8) life and work culture, (9) famous people and historical events, (10) manifestations, (11) cultural and religious institutions, (12) natural health resort, (13) sport-recreational buildings and grounds, (14) tourist paths, routes and roads, (15) attractions for the sake of attracting tourists, (16) tourist para-attractions that are divided into four groups:

- the traditional division, i.e. according to their emergence into natural factors that arose under the influence of natural actors (attractions from 1 to 6), and social factors that arose under the influence of human development (from 7 to 16);
- according to the level of originality to the original attraction (from 1 to 9) and altered attraction (from 10 to 16);
- according to tourist usage mostly for leisure (from 1 to 15) and non-leisure tourist attractions (16);
- according to the appearance of tangible (from 1 to 8 and from 11 to 16) and intangible tourist attractions (from 8 to 10).

It is important to emphasise that the author gives more subtypes in the form of an organogram, under protected cultural-historical heritage and their division into movable and immovable monuments, and there is an explanation that relates to each of the groups. Therefore, Kušen states that movable monuments include items and collections, i.e. paintings, sculptures, furniture, sacral furniture and treasures, the products of arts and crafts, ethnographic material and library material. Immovable monuments as a type comprise archaeological sites, monument units, memorial areas and buildings, single sacral buildings, single profane buildings and monuments of garden architecture. The author also mentions other subtypes in an organogram, like waters, whose group includes water in its bio-chemical composition (for instance medicinal water, mineral water, thermal-mineral water) which have great importance for the development of tourism in Continental Croatia.

### 3.2 Keeping records of tourist resources

When it comes to electronic record keeping through online databases, the system of keeping records of tourist resources has unlimited possibilities. Such a way of managing tourist attractions is in theory called a cadastre of tourist attractions. So, the tourist cadastre is a documentation system of keeping written data on all tourist attractions, those that al-

ready function in tourism as well as potential ones in a certain area, as shown in Table 1. Depending on the possibilities of online database management that Kušen emphasises, it is possible to expand it with additional written data, pictures, video content, geographical maps, GPS data, etc.

In the author's opinion, the functional classification of tourist attractions ensure the internal conditions for the operation of the system of record keeping of tourist attractions, but also the efficient data application of tourist attractions for the purpose of planning in tourism and for the purpose of their protection from destruction and irrational use (Kušen, 2003).

Therefore, the functional classification of tourist attractions cannot be for its own sake. It should serve in practice as a basic tool for the creation and keeping of records of tourist attractions, for their development and for its protective role in marketing planning. Furthermore, such an approach from the point of view of Continental Croatia sets a sound foundation for planning, and for the preparation and implementation of regional and international projects, especially if the projects are being prepared for financing by international sources.

Accordingly, the cadastre of tourist resources of Continental Croatia would comprise many papers of tourist resources, so that each would belong to the real or potential tourist resource and which would belong to a certain category of the basic functional classification of tourist attractions.

### 4. Results: Potential model of application of the theoretical concept in practice

Regarding the so-far elaborated concept of recognition of the tourist product, a potential model of application of the theoretical concept in practice is given for the purposes of this paper.

The first step in mapping tourist resources in some of the Continental counties should be founding a team for mapping tourist resources in a destination. The reason lies in the already accepted fact that tourism supply of great quality could be achieved if the following bodies are coordinated:

- tourist boards, local administration, the state administration office, cultural and scientific institutions;

- travel and tourist agencies;
- tourism suppliers (apartment, hotel and catering facility owners)

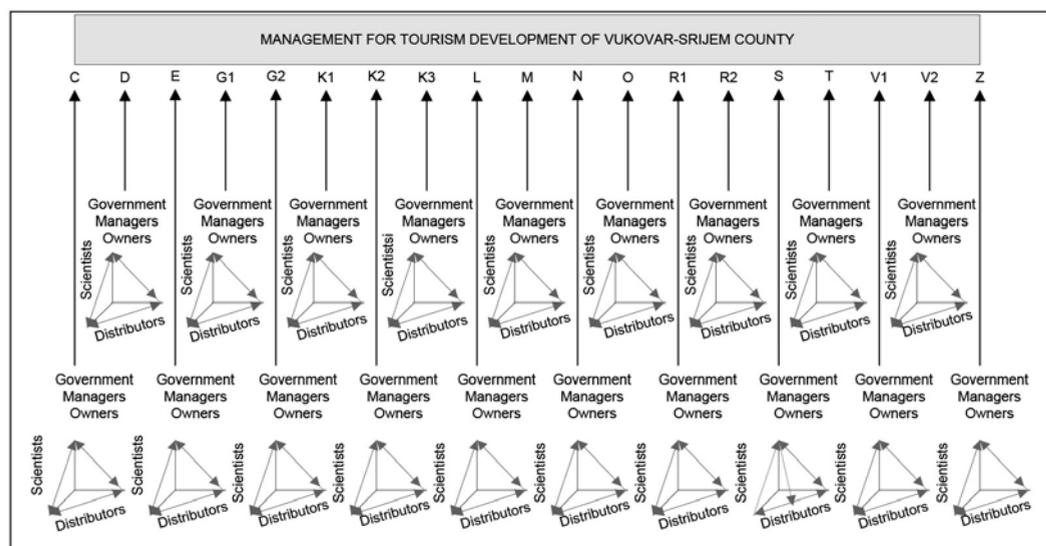
Through the collaboration of government institutions, the private sector and higher education under a triple helix model principle, it is possible to attain favourable business surroundings and, ultimately, gain a competitive advantage for the county's tourism.

In this way, a great number of experts would organise and work on theoretical and operative plans, thus ensuring better coordination, quality monitoring and evaluation. The team's first assignment would be to make an overview of the existing tourist resources of each county, which would then be entered into a central system. The observed team for the development of a particular selective form of tourism could be considered as one business unit for tourism at the level of the Continental county through its management and marketing teams, i.e. human potential responsible for mapping of tourist resources according to the model, as shown in Figure 6.

Teams for the mapping of a particular selective form of tourism in Continental Croatia are formed by the vertical merging of tourist subjects at county levels, so that there are as many teams as the county has tourism potentials:

- **team C** (alliances, associations, Hrvatske vode (Croatian Waters), Hrvatske šume (Croatian Forests), Hrvatske ceste (Croatian Roads), Županijske ceste (County Roads), administrative departments, tourist boards of counties and towns, tourist offices of municipalities responsible for mapping tourist resources of cycle tourism);
- **team D** (alliances, associations, administrative departments, tourist boards of counties and towns, tourist offices of municipalities, tourist travel agencies, tourist information centres, owners of castles, historical buildings, concessionaires responsible for mapping tourist resources of event tourism);
- **team E** (associations, competent ministries, administrative departments, institutions for the protection of natural wealth, tourist boards of counties and towns, tourist offices of municipalities, tourist information centres, tourist travel agencies, scientists, Hrvatske vode (Croatian

Figure 6 Management of mapping tourist resources at the county level



Source: Authors

Waters), Hrvatske šume (Croatian Forests), responsible for mapping tourist resources of eco-tourism);

- **team G1** (alliances, associations, administrative departments, tourist boards of counties and towns, tourist information centres, restaurant and hotel owners responsible for mapping tourist resources of gastro-tourism);
- **team G2** (associations, administrative departments, institutes for spatial planning, tourist boards of towns, tourist travel agencies, tourist information centres, owners of castles and historical buildings, scientists, concessionaires responsible for mapping tourist resources of city tourism);
- **team K1** (administrative departments, tourist boards of counties and towns, tourist offices of municipalities, tourist travel agencies, tourist information centres, scientists, hotel owners responsible for mapping tourist resources of congress tourism);
- **team K2** (associations, administrative departments, tourist boards of counties and towns, tourist offices of municipalities, tourist travel agencies, tourist information centres, scientists, museum, galleries, owners of castles and

historical buildings, concessionaires responsible for mapping tourist resources of cultural tourism);

- **team K3** (alliances, associations, administrative departments, tourist boards of counties and towns, tourist offices of municipalities, tourist travel agencies, tourist information centres, scientists, responsible for mapping tourist resources of equestrian tourism);
- **team L** (alliances, associations, administrative departments, tourist boards of counties and towns, tourist offices of municipalities, tourist travel agencies, Hrvatske šume (Croatian Forests), responsible for mapping tourist resources of hunting tourism);
- **team M** (alliances, associations, administrative departments, tourist boards of counties and towns, tourist offices of municipalities, tourist travel agencies, tourist information centres, scientists, museums, responsible for mapping tourist resources of memorial tourism);
- **team N** (administrative departments, tourist boards of counties and towns, tourist offices of municipalities, tourist travel agencies, tourist information centres, harbour administration, Hrvatske vode (Croatian Waters), responsible for

mapping tourist resources of nautical tourism);

- **team O** (alliances, associations, administrative departments, tourist boards of counties and towns, tourist offices of municipalities, tourist travel agencies, tourist information centres, Hrvatske vode (Croatian Waters), Hrvatske šume (Croatian Forests), responsible for mapping tourist resources of relaxation tourism);
- **team R1** (alliances, associations, administrative departments, tourist boards of counties and towns, tourist offices of municipalities, tourist travel agencies, tourist information centres, responsible for mapping tourist resources of recreational tourism);
- **team R2** (alliances, associations, administrative departments, tourist boards of counties and towns, tourist offices of municipalities, tourist travel agencies, tourist information centres, Hrvatske vode (Croatian Waters), responsible for mapping tourist resources of fishing tourism);
- **team S** (alliances, associations, administrative departments, tourist boards of counties and towns, tourist offices of municipalities, tourist travel agencies, tourist information centres, Hrvatske vode (Croatian Waters), Hrvatske šume (Croatian Forests), responsible for mapping tourist resources of rural tourism);
- **team T** (associations, Hrvatski autoklub (Croatian Auto Club), Županijska uprava za ceste (County Road Management), administrative departments, tourist boards of counties and towns, tourist office of municipalities, tourist travel agencies, tourist information centres, responsible for mapping tourist resources of transit tourism);
- **team V1** (alliances, associations, administrative departments, tourist boards of counties and towns, tourist offices of municipalities, tourist travel agencies, tourist information centres, museums, responsible for mapping tourist resources of wine tourism);
- **team V2** (associations, administrative departments, tourist boards of counties and towns, tourist offices of municipalities, tourist travel agencies, tourist information centres, parish priest's offices, responsible for mapping tourist resources of religious tourism);
- **team Z** (associations, administrative departments, tourist boards of counties and towns,

tourist offices of municipalities, tourist travel agencies, tourist information centres, healthcare institutions, responsible for mapping tourist resources of health tourism).

From the tourist resources mapped, it will be possible to help development agencies and departments within administrative bodies during the project preparation, both at the regional and international levels, which will be financed from structural funds, and help institutional support which has to search for solutions at the national level without changing laws, to obtain finance and provide technical help to put these resources into operation in the field of tourism. Furthermore, it is possible to help stakeholders in tourism for those tourist resources that satisfy the conditions of the tourist market best (traffic and tourist infrastructure, location, tourist accessibility, attractiveness), i.e. those that can immediately become part of the tourism supply through the creation of theme roads (itinerary), development manifestation, post-congress routes, on-line services, and mutual promotional appearances.

## 5. Conclusion

All tourist countries improve their tourism supply qualitatively and affirm selective forms of tourism with the goal of satisfying ever more demanding tourist needs.

We have seen that, in its development policy, Croatia has to move away from the model of mass tourism aimed at passive vacations. Thorough tourist development can no longer be based on the traditional "sun and sea" product because natural beauty is no longer the only motive for tourists to come. It is necessary to turn the natural resource base into a competitive advantage based on innovations through an innovative development policy and marketing strategy.

In this context, the conception of creating a new tourism supply could rely on the rich tourism potentials of the Continental part of Croatia, which accounts for just a small share of the overall tourist turnover of Croatia. Despite the fact that the problem of mapping tourist resources has been scientifically well elaborated, it has not lived up to its potential in practice. Hence, this paper offers a model that presents an operative and consultative level of

management which could solve this problem appropriately.

It is necessary to put into practice the question of mapping tourism potential as soon as possible in order to define a strategic approach to the development and management of the tourism supply of the Republic of Croatia in the best way possible. Moreover, it is necessary that such data access should be visible not only to administrative bodies that make their spatial and strategic plans and prepare projects, but also to all other private subjects in tourism within and outside the region. In this way, recognised tourist resources ready for presentation and commercialisation could be immediately put onto the market.

Furthermore, mapped tourist resources will greatly help not only the competent ministry in making decisions during strategic thinking and in forming the budget, but also other ministries and public companies in passing laws, regulations, statutes, providing subsidies, and devising taxing systems, etc.

The scientific sector should also not be left out. Despite numerous tourist resources, the problems of the Croatian Continental area have not been elaborated sufficiently from a scientific point of view. Such mapped tourism potentials available to everybody could therefore open great opportunities for necessary scientific elaboration.

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Mario Banožić  
Gabrijela Žalac  
Marijana Šumpor

## MAPIRANJE TURISTIČKOG POTENCIJALA: PREDUVJETI RAZVOJA TURIZMA U KONTINENTALNOJ HRVATSKOJ

### SAŽETAK

Mnogi hrvatski znanstvenici ističu kako turizam nudi značajne prilike koje mogu pozitivno utjecati na ukupni društveno-ekonomski razvoj Hrvatske. Postalo je jasno da Hrvatska mora bolje pratiti suvremene turističke trendove u kojima se više pozornosti poklanja ekologiji, kulturnom identitetu destinacije, aktivnom odmoru, kvaliteti usluge i selektivnim oblicima razvoja turizma. Nije sporno da su čisto more, atraktivna obala i bogatstvo prirodnih i kulturnih zanimljivosti prednost hrvatske turističke ponude u priobalnom dijelu zemlje. Međutim, postoje mišljenja kako i kontinentalna Hrvatska obiluje prirodnim ljepotama, kulturnim bogatstvom i kulinarskom ponudom te da ima i brojne druge nedovoljno iskorištene turističke potencijale. Različita mišljenja o turizmu u Hrvatskoj temelje se na statističkim pokazateljima, kao što su razina razvijenosti turističkih regija izražena kroz ulaganja u infrastrukturu, broj zaposlenih i izravna korist od turizma za gospodarstvo. Usprkos činjenici da kontinentalna Hrvatska ima obilje turističkoga potencijala, ono što se nudi prepoznato je samo na lokalnoj razini. Ovaj problem se negativno odražava u strateškom smislu, budući da je za planiranje i financiranje projekata potrebna regionalna dimenzija. Neki su autori (Kušen, 1999; Koščak, 1998; Krippendorf, 1986; Müller, 1994; Stabler, 1996; Travis et al., 1994) osmislili katastar turističkoga potencijala koji nikad nije bio implementiran. Namjera je ovoga rada mapirati turističke potencijale kontinentalne Hrvatske upotrebom triple helix modela, na temelju kojega se može razvijati regionalni turizam i osigurati financiranje budućih projekata.

**Ključne riječi:** kontinentalna Hrvatska, razvoj turizma, turistički potencijal, triple helix model

**Danimir Štros**  
Municipality of Brdovec  
Trg dr. Franje Tuđmana 1,  
10291 Prigorje Brdovečko,  
Croatia  
danimir@brdovec.hr  
Phone: +38513315886

**Daniel Bukovinski**  
Municipality of Brdovec  
Trg dr. Franje Tuđmana 1,  
10291 Prigorje Brdovečko,  
Croatia  
d.bukovinski@brdovec.hr  
Phone: +38513315881

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**Maja Coner**  
Municipality of Brdovec  
Trg dr. Franje Tuđmana 1,  
10291 Prigorje Brdovečko,  
Croatia  
maja@brdovec.hr  
Phone: +38513315885

# MANAGEMENT IN RURAL AREAS

## ABSTRACT

Croatia has been seeking to achieve pre-war results in tourism since its independence. Rural tourism in Croatia based on family farms faces a number of problems: legal foundations, the involvement of local communities, inadequate entrepreneur support etc. The political will for development exists, but there is a lack of willingness and the ability to get things started, which results in the closure of family farms that cannot cope simultaneously with agriculture and tourism. The main subject of this research is the implementation of tourism in rural areas in order to raise the quality of life and keep the young population in rural areas.

Arriving guests certainly want a new type of tourism: peace, clean environment, cultural intangible and tangible treasures, all without the noise and stress; and Croatia can definitely offer this, both in coastal or inland areas along with its traditional food and drinks.

The destination connection is not satisfactory. There is also an evident lack of legislation and regional spatial development plans for sustainable tourism which is a prerequisite for successful tourism. With these presumptions accepted, Croatian tourism would become distinctive and inland and coastal branches of tourism could complement each other so that the customer can spend his or her vacation both in the continental and the maritime part of the country, getting to know our culture and enjoying the traditional cuisine.

**Keywords:** Strategy, continental tourism, agriculture, regions, intangible and tangible goods, destinations

## 1. Introduction

For the purposes of this article, secondary information research has been made, including the information available on the Internet and contemporary literature about rural areas, problems and means of solving them, as well as a review of the present situation in countries which are members of the European Union and other countries. Better understanding of the problem of rural areas requires screening

of the current situation in Croatia and comparison with other European countries' attempts of dealing with the forementioned problem.

This article will make several strategic assumptions which might affect the development of rural areas in Croatia.

Tourism in Croatia is derived from tourism activities that take place at the seaside and it is the main industry, which is now the basis for tourism

in Croatia. The guests come to Croatia mostly because of the clear sea and the indigenous environment, especially on the islands. Thus it is necessary to take certain measures to avoid the devastation of the coast by overuse of concrete since it is evident that the guests come for the indigenous nature and everything that constitutes the tradition of living by the sea. Croatia should remain in this state not only because it will preserve the cultural identity of living by the sea, but also because the guests come for the beautiful nature that Croatia abounds in, especially at the seaside.

Of course, tourism itself is not sufficient without the other activities that will entertain the guests and allow them to spend their holidays in an active way so that they remember that holiday for a long time.

Croatian tourism as a strategic sector can not be based on maritime tourism that lasts for three months but should define the elements that will allow the extension of the pre-season and post-season. In order to include the whole territory of Croatia in tourism, the best alternative is to include both the rural and continental tourism in the Croatian tourist offer.

On the one hand, as an important resource for sustainable tourism, as well as for economic and social development, rural tourism encounters numerous marketing, managerial and economic difficulties in its development. On the other hand, there is a great demand for this type of tourism.

The development strategy should be implementing appropriate management models in this sensitive area, making agri-tourism household networking necessary as well as networking with other stakeholders wishing to participate in the development of rural tourism.

## 2. Theoretical frame

The research of available secondary information and the use of historical and comparative methods are made in order to ascertain the assumptions of revitalizing rural areas. The example of European countries shows a historical review of the occurrence of crisis in rural areas beginning with emigration from those areas which resulted in loss of income that supported the rural areas.

Theoreticians are not single-minded about the development of tourism in rural areas; they lack a unanimous stand on a common definition of rural tourism, but are unanimous in the stand that the rural area revitalization is necessary only through sustainable development and that rural policy needs to be led with the goal of implementing tourism in rural areas as a form of sustainable development.

The objective of this research is to produce several methods of revitalizing rural areas in Croatia based on the available information, but also to compare the information and determine issues arising in the European countries' policies and their positive aspects in order to implement tourism in the rural area as an aid in revitalizing the area and making sure that the domicile population stays, especially the younger ones.

## 3. The European Union and rural area development policies

Social and economic forces that operate globally determine not only the appearance but also the shape of the rural landscape and the manner of its evaluation and use (Butler, Hall, Jenkins, 1998). Since the 1970s, the process of economic restructuring and the crisis of agricultural production across Europe and the U.S. have threatened the economic potential of rural areas. This process has led to the loss of jobs and the closure of rural production facilities which resulted in the reduced number of farmers.

The reduction in the number of jobs and the loss of agricultural product placement possibilities has had a negative impact on the restructuring of the ownership structure in agricultural enterprises which has led to many of them abandoning primary production and searching for other sources of income, and even emigration.

Economic decisions regarding rural areas have been made in distant cities, which have also affected the development of rural areas – the 'top down' policies did not include rural area regional policies or 'bottom up' policies. These policies therefore resulted in the decline of the development potential in rural areas, and thereby reduced the traditional development strategies. Aware of the facts which had a negative impact on rural area development, the European Union attempts to stop the rural area emigration and has made a great effort through its

agricultural policies to reverse the trend and prioritize rural development. The policies in question include regional development policies, rural tourism and other policies, which encourage the youth to stay or return to the rural areas.

Some European countries such as France, the Netherlands and Sweden, have years of experience in the field of rural development, but most other European countries started giving more attention to the rural areas because of the initiatives and programs of the European Union.

According to Juen, the differences in the cultural and social context of the region affect the selection of their strategies, which can be classified into two main groups:

- a) Introvert strategy - the strategy of revitalizing rural areas based on their internal capabilities and strengths, and
- b) Strategies focused on the import of resources necessary for the development of the primary and tertiary sectors and improvement of the overall quality of the products in the region (Veer, Tuunter, 2005).

The territory of the European Union consists of about 80% of the rural areas with about 25% of the total population (Veer, Tuunter, 2005). It is also very important to note that the initiatives for the development of rural areas are now coming from the region itself and not from the cities that were not aware of the situation in the rural areas. Pursuant to the above mentioned, one of the solutions offered is the developmental model IRQ - Integrated Rural Quality (Krajinović, Čičin-Šain, Predovan, 2011). This model is implemented by the European Union with its Directive IRQ, and should serve as a foundation and model development of tourist destinations. The model is based on the experience of 15 cases of successful rural tourism destinations in Europe. IRQ will not completely solve these problems, because they are systemic and are a very important part of economic and social life, regional development, legislation and more, but it can be viewed as a prerequisite of better development of the rural area.

In accordance with the new policy towards rural areas of the European Union, support is given not only to the farmers but also to other participants in the development and promotion of rural areas.

The document titled "Agenda", adopted in 1999, defines new areas of interest of the European Union,

primarily focused on the development of the entire economy of rural areas.

With the above mentioned documents, all measures of development are sublimated and reduced to a single legislation or second tier because the first is focused on direct support to farmers (reform of market support, the European Community, 2003)

The most important strategies of the Agenda are (Krajinović, Čičin-Šain, Predovan, 2011):

- The strategy of strengthening agriculture and forestry
- The strategy of raising the competitiveness of rural areas
- The strategy of maintaining and protecting nature and rural cultural heritage.

The specificity of rural tourism is the rural development of tourist products, which are produced by the combination of agriculture and its resources, climate and natural diversity, traditions of local people, indigenous cultural resources and other facilities such as hiking trails, bike paths, cultural, entertainment and sporting events, exhibitions and fairs, souvenirs, recreational facilities, tourist signs, landscaping roads etc. (Krajinović, Čičin-Šain, Predovan, 2011).

## 4. Rural tourism in the context of the rural development policy

Populations of Many European countries accept tourism as one of the strategies of rural area sustainable development and, thereby the local community development. Rural tourism is developing as an entrepreneurship activity based on attracting visitors to non-traditional tourist destinations. Visitor growth in rural areas increases the demand for tourist services, which leads to an increase in entrepreneurial activities in services and activities available for visitors, including accommodation services. If they are pleased with the rural area and the service given, it can be expected that the visitors shall return eventually, and even participate in voluntary marketing by transferring their experience through the 'word of mouth' system, which will generate additional demand in the rural area.

The specificity of rural areas in Croatia is that the agricultural lands are fragmented and there is no

owner with 30 or more hectares. From the above mentioned, it is necessary to work on connecting with other owners to get a single successful unit. If rural tourism is to be implemented, it is necessary to offer indigenous agricultural products, as well as to cooperate with other manufacturers who are willing to engage in the rural tourism business, where this approach provides a synergistic effect.

Inclusion of family farms, local self-government units, tourist boards and tourist guides, charter companies etc. would successfully satisfy the ever-increasing demands of visitors and tourists. Specifically, modern tourists, as they are referred to nowadays, are eager to explore the culture, history and the living of the local population in the place where they stay.

According to Dr. Dragan Magaš, a professor at the University of Rijeka, the limit payload capacity of tourism is precisely the level of presence of tourists that creates a positive impact on the local population, environment, economy and tourists, and is sustainable in the future, which is a worthwhile concept (Magaš, 2000).

In order to minimize the negative impacts of tourism and maximize the positive effects, it is necessary to organize a high quality and professional management team that will manage the development process.

Tourism relies on the goodwill and cooperation of the local population because they are an integral part of the tourism product. Where development and planning are not in accordance with the local needs and opportunities, resistance and hostility can ruin the overall sector process.

##### 5. Rural tourism as a means of developing the tourist market

Today's tourist market is looking for new forms of spending free time. Mass tourism dominated by the sun and the sea has led to saturation, both in tourism demand and when it comes to offering new things. Tourists are looking for new places and ways to spend their holidays guided by the desire to learn about the native communities, local gastronomy, culture, authentic values and the quest for a way of life as lived by our ancestors.

One of the answers could be rural development and

Croatia should certainly increase its competitiveness and comparative advantage valorizing the rural area as a tourist destination.

By developing rural tourism, a tourist country contributes to further development of adjacent areas and enables their own tourist valorization. The evaluation of rural tourism of passive areas contributes not only to the development of these regions, but also to the preservation of the natural, cultural and historical heritage; improves the quality of life and most importantly enables employment and prevents migration from rural areas. A prerequisite for young people to stay in a rural area is economic activity: in this case, rural tourism that will provide young people with a chance to stay and receive adequate education in rural areas.

The problem that is related to difficulties in the implementation of rural tourism is primarily the weak economic strength of family farms (OPG) where it is very difficult or almost impossible to work in both agriculture and tourism. It is therefore necessary to consider rural tourism as a separate branch which will develop family farms with the involvement of the local population on the basis of agreements, contracts and the like. This primarily refers to the subcontractors who will offer their agricultural products and accommodate guests who are eager to actively participate in daily farm chores. In addition, there is the problem of inadequate financial incentives and lack of recognition of rural tourism as a form of tourism which adds value to the tourist board.

Based on everything mentioned above, the whole problem lies in the inadequate way of managing the development of rural areas that should increase economic activity and keep young people in rural areas.

In Croatia, only the Istria region can be pointed out as a region which began the valorization of rural areas with significant subsidies and incentives of the regional public sector and in the hinterland of the strongest tourist destinations in Croatia.

Unfortunately most of the Istrian farmhouses are on the verge of closure because they operate on the edge of economic viability due to the inability to manage two parallel economic sources: agricultural production and rural tourism.

This article aims to highlight one of the key issues, and that is the strategic management of the devel-

opment of rural tourism in the region. According to the available data by the Istria Tourist Board from 2010, the status of rural tourism in Istria County is evident, and that is actually a small display of the level of rural tourism in the whole of Croatia. According to the data, rural tourism is the occupation of only about 200 households.

The conclusions presented in the article were adopted on the basis of a comparative analysis of Croatia with other tourism oriented countries, and an analysis of the problems which the developed countries encountered in the stages of development of rural tourism. The conclusions of the Istrian region were adopted from a survey of households engaged in rural tourism. A possible solution is the IRQ development model, which was implemented in 15 successful rural tourist destinations in Europe (such as Austria, Germany, Italy, etc.).

Sustainable Development Strategies are as follows (Krajinović, Čičin-Šain, Predovan, 2011):

- The strategy of agricultural development that does not harm the environment
- The strategy of efficient use of water and energy
- Waste management strategy
- Green building strategies- the traditional way
- Marketing Strategy
- The strategy of establishing ecological transportation
- The strategy to preserve the cultural heritage
- Speech conservation Strategy
- The strategy of cooperation with local and regional governments.

##### 6. Definitions of rural tourism

The definition of rural tourism has been the subject of many discussions, but a consensus has not been reached (Pearce, 1989; Bramwell, 1994; Seaton et al., 1994). The series of possible reasons include the following:

- Areas where rural tourism is active are hard to define because different countries use different definitions,
- Not all tourist activities in rural areas are necessarily 'rural', but can be 'urban' by its context, only

not by its location

- Different regions establish different forms of rural tourism and it is difficult to find a common denominator
- Rural areas are in the midst of complex reform processes as a result of global changes, the communication and telecommunication revolution which altered the market conditions and the demand for traditional products and services.

Rural areas are experiencing severe depopulation processes and there is an evident lack of immigration processes by retired people who could revitalize the rural area for specific products and services. The once clear distinction between rural and urban has been all but erased, which has led to urbanization, a long-distance product exchange and building of vacation houses (OECD, 1994).

Besides the term 'rural tourism', there are many terms in use. There is an entire specter of circumstances leading to different concepts which ultimately separate their authors.

There are two types of definitions:

1. Nature tourism, rural tourism and agritourism (each of the mentioned categories is derivative of the former), based on the percentage of income distribution to the local population and to the entrepreneurs.
2. The difference is based on altering elements of the tourist offer.

Because of the forementioned in the second group, rural tourism exploits the situation when rural culture is the centerpiece of the tourist offer. Based on the primary component of the product, terms such as agritourism, green tourism, hunting tourism, adventure tourism, historical tourism, cultural tourism and others are used.

Tourist activities taking place in large tourist settlements, hotels, golf resorts etc. can hardly be incorporated into the rural tourism concept. Tourism in rural areas is specific in that it attempts to achieve close personal contact with the tourists and enable their participation in the local rural community's everyday life. It is very important to note the aim of consuming cultural, gastronomic and other elements through this form of tourism. If the authors' views are to be summarized, rural tourism could be defined as an area with a natural, forested environment where natural, economical and sociocultural

aspects such as tradition, local cooperation and interpersonal relations, based on small-scale economy with a 'friendly' treatment of the environment, combine to form sustainable development.

### 7. Rural tourism as a strategy of rural and regional development

Tourism as an economic activity primarily represents a consumer activity. Most of the research is focused on the consumers, their needs, wishes and motivation. What attracts most of the consumers to rural areas is open space recreation, returning to 'good old times', simple way of life, gastronomy 'like in your grandmother's kitchen', tangible and intangible assets of rural areas etc.

The necessity of returning to one's roots and living a simple life with no stress or urban environment leads to an increased demand for rural areas (Kastenholtz, Davis, Paul, 1999).

The importance of rural tourism as a part of the tourist offer certainly depends on the resources of an individual country, infrastructure, market availability and competition.

Although rural tourism has less importance for the total tourism market, it is very significant for the development of rural areas and the return of the domicile young population. It is evident that tourism and its complementary entrepreneurship initiatives have become one of the most popular development strategies of the rural area (Lane, 1990; Clarke, 1981; Witt, 1987).

The assumptions favoring tourism as a development strategy of rural areas:

- rural tourism can exist with cooperation from local self-government and small and medium enterprises without the need for large companies and corporations
- rural tourism can be developed with relatively small capital and knowledge investment, resulting in decreasing the operating costs
- rural tourism opens possibilities for small and medium enterprises whose business would not otherwise be possible in the rural area, especially entrepreneurs offering accommodation services, shops, recreation objects and other infrastructure necessary for successful business in rural tourism

ism – existing farms generate secondary income (Wilson et al. 2001).

Tourism as a development strategy contributes to the rural area revitalization, decreases social tensions, encourages employment, expands existing farm businesses and generally enables sustainable regional development.

Rural tourism in the world is experiencing an increasing demand growth in the tourism market due to public support for the development of rural areas, which is typical for developed countries.

### 8. Rural tourism area product

Location specific products can not offer a universal model of rural tourism product and destination development (Mathieson, Wall, 1982), but can certainly contribute to defining a basic frame for a better understanding of the rural tourism destination and product.

Butler's destination product life cycle theory (1980) had a pivotal role in defining the basic model for understanding the tourist destination and product. His flexible lifecycle model marks different phases in the evolution of the destination and the changes happening in it throughout its transition from one phase to another. The critical factors are: a change in the needs of the consumer, devastation of the natural environment and a change or the disappearance of the attractions that first brought tourists to the area. One of the major factors in the evolution of the destination is identification of potential consumers, adequate markets and modes to approach them. Understanding the rural tourists is necessary if their expectations are to be met.

For the tourist destinations to keep their competitiveness, they have to fulfill basic tourist needs – needs for accommodation and food. Along classic venues for accommodation, village and farm houses are often wanted. By including services in their portfolio, farm owners diversify their activities and raise the value of their product and estate services. Tourists that prefer such accommodation seek originality in diet, intimacy, participation in everyday tasks and forming friendships, which represents values almost forgotten in the modern age. Tangible and intangible assets of the destination affect the decision to visit it because tourists want to

see the surroundings in which the local people live (churches, parks, museums, customs, dialects etc).

The rural tourist destination as an integrated product is very fragile from an ecological, social and cultural aspect. Hence it requires a specific approach to its development aiming at achieving long-term sustainability.

*Table 1 Rural and urban areas, population and settlements according to OECD criteria*

Classification	OECD criteria					
	km <sup>2</sup>	%	Number of settlements	%	Number of residents	%
Rural areas*	51,872	91.6	6,001	88.7	2,110,988	47.6
Urban areas	4,731	8.4	763	11.3	2,326,472	52.4
Total	56,603	100	6,751	100	4,437,460	100

Source: Central Bureau of Statistics, in 2001  
\* Includes both rural and urban areas

From Table 1 it is evident that Croatia has about 52,000 sq km of rural areas, which supports the fact that there are plenty of arguments for the implementation of tourism in rural areas. The rural area is very sensitive to cultural, natural or any other damage triggered by the development of tourism. During the valorization of rural tourism special care should be taken to protect nature, culture, water, etc., because in this way, the natural beauty and cultural heritage are preserved and can be adequately incorporated into the very offer. Special care should be taken because the historical aspect of the buildings and construction should only be allowed in respect of indigenous architecture; or a modern architectural solution should attempt to fit the accommodation capacities into the rural. If the order and the existing natural resources are violated, the tourism would not make sense because the tourists in a rural area look for untouched nature, peace, tranquility, hospitality and of course the indigenous environment and the answer to the question of how our ancestors lived.

The main characteristic of the Croatian rural policies is an attempt to stop the development lag in rural areas by using all of their resources.

Croatian policies follow the European Union's rural development policies with its development documents and acts. The objective is to keep the population in rural areas, equalize the quality of life in rural and urban areas, enable the return of the population from urban to rural areas, increase production competitiveness and thus create a larger income for the agricultural producers. Strategic objectives for Croatia's rural development are contained in the Development strategy of the Republic of Croatia 2008-2013:

1. increase in the competitiveness of the agricultural and the forest sector;
2. preservation, protection and sustainable use of the landscape, the cultural and natural heritage;
3. increase in the quality of life in rural areas and the expansion of the economic programmes;
4. increase in the effectiveness of the institutional environment.

Croatia gained access to the LEADER programme through the IPARD instrument. The LEADER consists of connecting nearby local communities into a partnership for rural development (LAG – Local Action Group) based on common characteristics, resources and interests, which will define, prepare and conduct a local development strategy.

Basic elements of LEADER implementation are determined in the IPARD programme for agriculture and rural development according to the EU regulations. Although the implementation act adoption was delayed (Protocol on implementing the measure 202 – preparation and implementation of local rural development strategies, or LEADER Protocol), which would determine the criteria and means of co-financing local action partnerships business expenditures, LEADER implementation in practice has had significant progress in Croatia.

Civil society organizations, especially the Croatian rural development network, have an important role in the promotion, explanation and advocacy of the LEADER approach. The Network organized the first Croatian rural development conference in 2006, which assembled representatives from all three sectors in Croatia, including the ministries responsible for rural development or its components. According to the IPARD programme determinants, the LAG area in Croatia consists of a rural area with a population of 5,000 to 150,000. The LAG can be comprimized by several neighbouring communities including towns with less than 25,000 inhabitants. A LAG territory is a distinct and recognizable economic, social and geographic unit and cannot overlap with other LAG territories.

The LAG is formed from representatives of three sectors (public, civil, economy), wherein the public sector has less than 50% of representatives. Experience shows that the group creation process begins with raising awareness about self value and area value. It needs to be done through careful implementation of techniques that can be used by motivated individuals and through assigning tasks that can be managed.

Local action groups enable not only IPARD implementation, but also possibilities of applying projects to other IPA components (regional cooperation, regional development and human potential development). The LAG selection for receiving IPARD aid will be conducted through predetermined procedures. The Ministry of Agriculture, Fishery and Rural Development is responsible for setting up the framework, and the IPARD agency for conducting procedures. By late 2010, over ten LAGs were registered in Croatia.

Rural area development measures have not been successful in practice. The LAGs have been formed, but their operation with the objective of rural area revitalization is not present. From the above, tourism as an economic activity is not mentioned at all, so this article can provide a contribution to the common attempt of rural area revitalization in Croatia.

### 9. National policy in the rural development function

Tourism development in rural areas is the subject of discussion in many European countries with the goal of upgrading global, social and economic development of rural areas.

The following policies are used the most:

- administrative help which enables faster and easier access to necessary information
- legislative regulation adapted to a 'bottom up' approach
- professional training, educational workshops, adjusting the programs to the needs of tourist service providers
- taxation and finance adapted to aid the rural area and all stakeholders
- easier and cheaper loans, subventions and grants
- building the necessary infrastructure
- management marketing.

Most European countries don't have complete legislative regulations regarding tourism in rural areas. Exceptions are Italy and the United Kingdom. Italy regulated its agritourism in 1985 with Directive No 739, and implemented the new Agritourism Law in 2006 and a series of laws and rules regarding it. The United Kingdom regulated the rural area issues on the regional government level. Nearly all the European Union countries conduct entrepreneurial education for tourism development in the rural area. Education is continuous and takes place through tourism institutes, ministries of agriculture and tourism, open courses etc.

### 10. The strategy of implementation of modern architecture

Figure 1 is an example of modern architecture that can adequately conform to the rural area. Of course each destination that wants to develop a rural area should bear in mind the construction of authentic houses and other premises that serve the purpose of rural tourism. Modern architecture can be implemented where there is a shortage of accommodation and a smaller space. This approach can solve the problem of increased housing with least infringement on the environment in which the facilities are located.

Figure 1 Modern architecture in a rural area (Dalmatia, Istria)



Source: Available at: <http://ljubuski.net/13184-hercegovina-je-nova-istra-samo-ljudi-jos-nisu-prokuzili> (Accessed on: January 10, 2014)

The building in the picture can conform nicely into a space dominated by Dalmatian stone where there are not enough green areas such as pastures, meadows, forests, etc.

Figure 2 Modern architecture in a rural area (Croatian Zagorje)



Source: Available at: <http://www.dnevno.hr/magazin/v-i-p-studio/80367-foto-bunga-bunga-kuce-pogledajte-luksuzne-vile-silvija-berlusconi.html> (Accessed on: January 10, 2014)

Figure 2 represents the solution of a business complex which serves the purpose of reception and accommodation of guests.

This building contributes to increasing the number of tourists because it is known that the Croatian Zagorje has fragmented agricultural land and one can not build in the traditional way due to limited space.

The rural area which will deal with rural tourism should base its food and drinks production on traditional methods of production without the use of pesticides and offer the guests only what is organically grown on farms. Pesticide-free production protects the land and the environment.

### 11. Conclusion

To understand the problems of rural tourism, (OPG) family farms in Croatia should consider a broader framework that consists of a number of factors such as laws, the involvement of local communities, etc. One should also consider the diversification of the Croatian territory from the aspect of population density. According to the Statistical Yearbook of the Republic of Croatia from 2005, Croatia has 128 cities, 428 municipalities and 21 counties, including the capital, the City of Zagreb. Official Croatian statistics do not use the population size as a factor of determining rural from urban areas, but primarily use political criteria. According to the OECD criterion, which classifies all communities under 10,000 people as predominantly rural, Croatia is a dominantly rural country.

The new European policy on the revitalization of rural areas has a significant budget for rural areas contained in the Agenda and LEADER programmes which are designed to advocate the regional development of rural areas. The European Commission clearly stated its intent to implement tourism in rural areas through the forementioned programmes.

Considering that every European Union member state creates its own rural development programme, Croatia has good possibilities here because it is a highly rural country. It can also use the negative and the positive examples which resulted in the leaving of the rural area or developing it in a sustainable manner.

Based on the information, it is evident that Croatia needs to access revitalization of its rural areas and make it a primary goal of policies to develop rural areas and, on the basis of the strategies mentioned,

implement tourism in those areas.

Rural tourism in Croatia, particularly in Istria as the region that started this type of tourism, faces a number of problems; legal foundations, undefined jurisdiction of the ministries (agriculture, tourism, regional development or some other) to the problems at the local and regional level of local and regional governments and local and regional tourist boards.

The political will exists, but not the willingness to get things started, which results in the closure of family farms that could not cope simultaneously with agriculture and tourism.

Guests arriving in Croatia could book an arrangement offering seaside accommodation along with the rural, thus extending the tourist season and revitalizing rural areas. Destination connections can be done through charter flights which are fast and efficient and keep the guests well entertained without major time losses.

Strategic development should be seen in the context of the overall development of rural areas. Since sustainable rural tourism reduces the harm to the environment to a minimum level and can be a promoter of environmental protection (concerned with ecology, culture, sport), there should be a compromise between all factors in rural tourism: the public administration, the owners of family farms, tourism entrepreneurs, tourist offices and all other institutions involved in the development of rural areas in any way.

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Danimir Štros  
Maja Coner  
Daniel Bukovinski

## MENADŽMENT U RURALNOM PODRUČJU

### SAŽETAK

Hrvatska od svoje samostalnosti nastoji postići turističke rezultate koje je imala prije rata. S obzirom na to da se deklarirala kao turistička destinacija i da joj je turizam strateško opredjeljenje, trebala bi iskoristiti sve svoje komparativne prednosti i implementirati turizam i u ruralna područja kako bi imala jedinstvenu ponudu od kontinentalnoga do priobalnoga dijela. Glavni je cilj istraživanja ovoga rada uvođenje turizma u ruralno područje te na taj način podizanje kvalitete života i zadržavanje mladoga domicilnog stanovništva u ruralnom području.

Problematika ruralnog turizma na obiteljskim poljoprivrednim gospodarstvima uključuje niz čimbenika kao što su zakoni, spremnost uključivanja lokalne zajednice, nedovoljna podrška za poduzetnike itd. Politička volja za razvoj postoji, no nedostaje spremnosti i sposobnosti za konkretne poteze što rezultira zatvaranjem obiteljskih poljoprivrednih gospodarstava koja se ne mogu nositi s paralelnim poslom vođenja poljoprivrede i turizma.

Gosti žele turizam koji uključuje mir, čist okoliš, kulturna nematerijalna i materijalna blaga. Priobalni i kontinentalni dijelovi Hrvatske svakako to mogu ponuditi, uz tradicionalna jela i pića.

Povezanost destinacija nije zadovoljavajuća. Nedostaju regionalni prostorni planovi razvoja održivoga turizma (koji su njegov preduvjet) te zakonska regulativa. Kada bi se prihvatile navedene pretpostavke, hrvatski bi turizam bio prepoznatljiv te bi gost, za vrijeme godišnjega odmora u kontinentalnom i priobalnom području, upoznao kulturu i uživao u tradicionalnoj kuhinji.

**Ključne riječi:** strategija, kontinentalni turizam, poljoprivreda, regije, nematerijalna i materijalna blaga, destinacije

M. Mercedes Galán – Ladero  
Faculty of Economics and Business  
University of Extremadura  
Avda. Elvas, s/n.  
06006 Badajoz, Spain  
mgalan@unex.es  
Phone: +34924289300

Clementina Galera – Casquet  
Faculty of Economics and Business  
University of Extremadura  
Avda. Elvas, s/n.  
06006 Badajoz, Spain  
cgalera@unex.es  
Phone: +34924289664

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## THE ROLE OF THE RETAILERS IN CAUSE-RELATED MARKETING: A REFERENCE TO THE SPANISH CASE

### ABSTRACT

Cause-Related Marketing (CRM) is one of the most relevant Corporate Social Responsibility (CSR) initiatives nowadays. Its most important characteristic is that corporate donation is conditioned by sales, that is, CRM ultimately depends on consumer behavior.

In this paper, we focus on CRM programs and its application in a specific industry: the distribution sector. Thus, our aim is to understand the fundamental features or the practice of these programs in the distribution sector in Spain, to study the role played by retailers and their possible influence on the consumer behavior, so that companies can better design these campaigns and achieve greater success.

Hence, the paper is organized as follows. First, we review the CRM conceptual framework in which the theoretical development of this work is based. Secondly, from a list of companies associated with the National Association of Large Distribution Companies (ANGED), the most representative retail association in Spain, we observe the Spanish situation and analyze the main campaigns carried out by these retailers during the last years. This information was completed consulting each retailer's website, asking them for additional information by email, and with a general Internet search. After that, we present and discuss the main results, and summarize the most relevant conclusions, as well as the theoretical contribution and managerial implications. One of the most important findings shows the retailer's influence on consumer behavior and the key role of the retailers in the success of CRM programs. Finally, we also include possible limitations and further research.

**Keywords:** Cause-related marketing, retailers, consumer behavior, corporate social responsibility

## 1. Introduction

Corporate Social Responsibility (CSR) has become a relevant topic in the new 21<sup>st</sup> Century. It is a wide and complex concept that is evolving, and it has been defined in different ways. Thus, the European Commission (2011) defines CSR as “*the responsibility of enterprises for their impacts on society*”. Kotler and Lee (2005) define it as “*a commitment to improve community well-being through discretionary business practices and contributions of corporate resources*”. AMA (2015) establishes that “*CSR is seriously considering the impact of the company’s actions and operating in a way that balances short term profit needs with society’s long term needs, thus ensuring the company’s survival in a healthy environment*”.

There are several theories that support the CSR theoretical framework. Among them, two theories stand out (Galán et al., 2013a): the Stakeholder Theory and the Resource – Advantage Theory (Ferrell, 2010).

On the one hand, the Stakeholder Theory (developed by Freeman, in 1984) considers the firm as a wide and complex network of relationships. The corporate management is directly linked to this network of relationships. It tries to harmonize different stakeholders’ interests, which are often multiple, divergent and even opposite, to create sustainable welfare and wealth for all the stakeholders, and the society in general in the long term.

On the other hand, the Resource – Advantage Theory (developed by Hunt, in 1995) establishes that competitive advantage will come from firms that developed the best resources in a heterogeneous and changing environment. Thus, the defense of business ethics and CSR could help to get the resource advantage.

Thereby, CSR is a new way of thinking, a corporate culture based on ethical management as a channel to improve the competitiveness and corporate reputation (Forética, 2002: 13). To actually get a competitive advantage, CSR should be integrated into the corporate culture, strategy and mission (Galán et al., 2013a).

Consequently, CSR has become a transcendental intangible resource for all kind of organizations. Although in an early stage CSR was mainly driven by certain large corporations, nowadays CSR is applicable to any type of business, and in all sectors.

In this work, we focus on the commercial distribution sector. We have chosen this sector because of its importance and because it is not enough studied (research on this topic is still scarce). It is a highly concentrated sector, dominated by a small number of companies (and the concentration level continues to increase). This sector has undergone a major restructuring in the last years, because of the change of trend in consumer habits and the impact of the economic crisis (Núñez, 2014). In this context, CSR has gained greater relevance, and socially responsible actions in this sector are becoming more numerous and varied.

In the specific case of commercial distribution, CSR tends to focus on three streams (ANGED, 2013; Martín, 2013; Vázquez, 2013; Galán and Galera 2014):

1. The commitment to the environment, with sustainable practices (e.g. environmental efficiency; energy saving; developing eco-efficient stores; redesigning the packaging of products to make them easier to recycle and less polluting – eco-design, use of more sustainable raw material, efficiency seals, ... -; reducing the use of plastic bags for single use; encouraging recycling, reuse, recovery and proper treatment of waste to avoid possible impacts on the environment; awareness campaigns to reduce waste; or the optimization of logistics processes – routes and supplies -).
2. The commitment to employees (e.g. maintenance of employment – job stability and security -; improving working conditions and the working environment in general; establishing measures to reconcile work and family life; equality plans; improving the employees’ skills with training and expertise courses, and internal promotion programs; offering job opportunities to various groups at risk of social exclusion; establishing internal codes of conduct; encouraging corporate volunteering; safety and prevention of occupational hazards, etc.).
3. The commitment to society, defending the consumers’ interests and taking care of customer service (e.g. commitment to saving – prices, product efficiency -; better access to purchases, facilitating credit; quality and product safety; service channels and customer information – campaigns about consumer education, responsible purchasing, and prevention of childhood obesity; consistently improving product offer-

ings to respond to new demands and putting attention to groups with specific consumer needs – low sodium products, sugar-free products, gluten-free products, lactose-free products, organic products, labeled in Braille, ... -; developing awareness campaigns on nutrition and consumption; improving accessibility to stores – removing barriers to physical and sensorial mobility -; signing cooperation agreements with various NGOs; making donations - monetary and / or in kind ones -; collaborating in humanitarian, aid and emergency campaigns; or developing sponsorship activities in different areas – cultural, artistic, sporting, or scientific ones).

In addition, also supporting suppliers, with commitment to all territories and local economies in which they operate; with the implementation of good practices in the processes of production, processing, and distribution; or with codes of conduct for contacts with suppliers.

In this paper, we will focus on this last stream. In particular, we will observe the frequent collaborations with different NGOs, which include donations of surplus food, assignment of space in the stores for the collection of products and / or funds for solidarity projects, sales of ‘solidarity’ products (e.g. Christmas cards from different NGOs), or awareness about certain causes.

Among the various CSR initiatives existing (see Table 1), we will focus on the so-called cause-related marketing programs, which refer to those campaigns where companies collaborate with nonprofit organizations making a contribution to a particular cause depending on the sales made (Kotler and Lee, 2005).

Our study, therefore, aims to add to knowledge in the domain of cause-related marketing (CRM), furthering the commercial distribution sector. To do this, and from a review of the extant literature to set the conceptual framework, we conducted a descriptive study of the major campaigns undertaken by retailers in Spain in recent years.

Our objective is to understand the fundamental features or the practice of these programs in the distribution sector in our country, to study the role played by retailers and their possible influence on the consumer behavior, so that companies can better design these campaigns and achieve greater success.

Hence, the paper is organized as follows. First, we review the conceptual framework in which the theoretical development of this work is based. Secondly, we describe the adopted research design and the methodology followed. After that, we present the main results, which are also brought under discussion. Finally, we summarize the most relevant conclusions that follow from the research findings, as well as the theoretical contribution and managerial implications. We also include possible limitations and further research.

Table 1 Major CSR Initiatives

Initiatives	Main Focus
Cause Promotions	Persuasive communications, to raise awareness or interest for a social cause. Emphasis on promotional strategies (focus on external communications). Target audiences, outside the organization.
Cause-Related Marketing	Contributions and support, linked to sales of the company’s specific products. It depends on the action or consumer’s response. It includes more communication (mainly advertising).
Corporate Social Marketing	Influence the individual’s behavior changes (focus on behavior change).
Corporate Philanthropy	‘Extending a check’. Direct contributions to a cause or a charity (cash donations and / or in kind). It is the most traditional of all corporate social initiatives.
Community Volunteering	Corporate volunteering service in the community (employees donate their time and talent).
Socially Responsible Business Practices	Discretionary business practices and investments that support social causes to improve the community’s welfare and to protect the environment.

Source: Adapted from Kotler and Lee (2005)

## 2. Conceptual Framework

The theoretical development of CRM is based on the evolution of the marketing concept to the social perspective (social dimension of marketing), the emergence of non-business marketing and corporate social responsibility, while other concepts used, as market orientation, marketing relationships, stakeholder orientation, holistic marketing orientation (Kotler et al, 2006) and towards sustainability (Crittenden et al., 2011; Hult, 2011; Hunt, 2011), have also encouraged the development and expansion of CRM - Galán et al. (2013a), Galán and Galera (2014).

The majority of the authors consider the origin of CRM in the eighties, in the United States<sup>1</sup>, when a series of simultaneous events occur (Austin, 2000; Galán et al., 2004):

1. Appearance and greater visibility of the so-called 'responsible consumers,' those who observe the companies behind the products they consume. And the remarks, positively or negatively, influence their buying behavior. Indeed, some of these consumers are willing to reward companies that give back to society by paying more for their goods and services (Nielsen Global Research, 2014).
2. Adoption of social responsibility by companies. Enterprises increasingly recognize CSR as a key to success, because it improves their corporate image and reputation.
3. The need of new funding sources for nonprofit organizations (the reduction of the public funding and the growing number of NGOs increase the 'competition' in the nonprofit sector).

In Spain, CRM came in the nineties. Since then, it has experienced a rapid and intense growth to, virtually, all the sectors (Galán and Galera, 2014). Nowadays, its popularity is evident in the amount spent by companies on social causes showing yearly growth of 3.4%, and totaling to \$1.84b in the USA in 2014 (IEG Sponsorship Report, 2014).

Throughout these years, the CRM definition has evolved (Galán, 2012): first, CRM was considered as a type of sales promotion; then, as an element of corporate philanthropy; and, nowadays, it is described as a CSR initiative. From Santesmases (1999), and Kotler and Lee (2005), we can define CRM as "a CSR initiative that is an agreement between a company

and an NGO to work on a social cause and thus obtain a mutual benefit. The commitment of the company focuses on contributing (financially or in kind) to the cause in terms of sales or product use (therefore, the donation will depend on consumer behavior)" - Galán et al. (2013a). Normally, the campaign is carried out for a certain product, for a particular period and for a specific NGO.

The most crucial aspect of the CRM definition (which is what most distinguishes this initiative, according to Kotler and Lee, 2005) is that the donation depends on sales (or use) of a certain product, the link between donation and product selling (transaction). That is, the levels of corporate contribution depend on consumer action (Penelas et al., 2012). Therefore, its main goal is to positively affect consumer attitudes and buying behavior (Fries et al, 2009).

The most common type of CRM is one in which a company donates a portion or percentage of every purchase made by its customers (transaction-based promotions) to an NGO. However, there are some variations on this, and not all CRM campaigns channel money to the nonprofit organization (they may be in-kind contributions: food, equipment, services, etc.) -Galán and Galera (2014).

The supported causes and / or NGOs are also varied: from fighting against different diseases (e.g. cancer), to supporting child welfare and education, combating hunger, or environmental protection.

The degree of CRM incorporation into business strategy has also evolved (Galán et al., 2013a): from applying it to usual products, to modify the product linked to the campaign to be socially responsible, and even changing the corporate culture so that the cause (support to cause) is integrated in it. The most common types of product links and contribution agreements are summarized in Table 2.

According to various studies, a number of consequences for the company are caused by changes in consumer behavior (Galán and Galera, 2014): when price and quality are equal, solidarity becomes a decisive factor for individuals (purchases are increased); the testing of new products is also promoted, and the acceptance of existing ones is enhanced. In addition, consumer skepticism decreases, because NGOs have great credibility (their link with the campaigns 'calms' to potential buyers, who could think that the company only seeks to exploit a good cause to sell more, to achieve an image

Table 2 The most common types of product links and contribution agreements

TYPES	EXAMPLES
According to the donation type	A specific amount of money for each product sold
	A specific amount of product (good or service) for each application
	A percentage of a product sales or transaction is donated to the NGO
	A portion of an item sale will be donated to a charity (without specifying the amount)
	The company adjusts the consumer contributions relating to the product
According to the number of firm's products involved	A specific product
	Some products
	All the products
According to the duration of the campaign	A specific period of time (short-term program)
	For an indefinite period (long-term program)
According to the chosen cause	Health
	Childhood
	Basic needs (e.g. combating hunger)
	Environment
According to the geographical scope of the cause	Other causes
	Local scope
	Regional scope
	National scope
	International scope
According to the number of NGOs involved	Global scope
	One NGO
According to who pays the cost of the campaign	Some NGOs
	The company pays the cost
	Both consumer and company pay the cost
	Consumer pays the cost

Source: Adapted from Galán et al. (2013a)

washing,' or to output low quality products). CSR is also increasingly important to the competitiveness of enterprises. It can bring benefits in terms of risk management, tax incentives, cost savings, access to capital (attracting good investors), stakeholder relationships (and customer relationships, in particular), human resource management (employee motivation, loyalty, commitment, and productivity), access to the media, and innovation capacity (Galán et al., 2013a; European Commission, 2015).

Thus, consumers identify themselves with the company, considering that it offers social and ethical values (the company is recognized as a socially responsible organization, involved with society), thus promoting trust and, consequently, generating greater satisfaction (individuals feel better when they buy these products, and because participation in a good cause is easy and little effort is required). Thus, an emotional link is created between the company and its consumers, by sharing values. In turn, this leads to an increasing number of customers:

attracting new customer segments, fostering purchase repetition, and leading to greater customer loyalty to the brand or company (Galán and Galera, 2014).

In the particular case of the retailers, CRM also promotes cooperation and commitment among channel members, improving long-term relationships. Sometimes, what is known as a “domino effect” also occurs: when a retailer adopts a socially responsible activity, other retailers copy and imitate that activity to remain competitive and not to be out of the market.

And, in the specific case of the supermarkets, they can increase the number of visitors and, consequently, their sales: because new consumers enter these establishments looking for the solidarity product, as do the regular customers. All of them usually buy other products besides the “solidarity” product or the product that supports a specific cause (Galán and Galera, 2014).

### 3. Research Design, Methodology, and Results

#### 3.1 Research Design and Methodology

Our research aims to review the situation in Spain and analyze the main CRM campaigns carried out by the commercial distribution companies in recent years. We also study the role of retailers in such programs and consider how they can affect the consumer behavior. To do this, we consulted the National Association of Large Distribution Companies’ (ANGED2) website to obtain a list of organizations associated.

ANGED is the most representative retailing association, in Spain. It offers the widest and most complete range of retail formats, products and brands in all categories: food, home, electronics, textiles, leisure, culture and services. Moreover, companies associated with ANGED have assumed a firm CSR commitment.

After we consulted each retailer’s website to see what CRM campaigns they had carried out in the last years, we also sent them emails to complete the information about the campaigns. Finally, we searched for more information about these campaigns on the Internet (Google, specifically).

Finally, we analyzed the total of 17 companies which were ANGED members in 2014. We found 23 CRM

campaigns that had been carried out since 2007 by some of these organizations (see Table 3).

#### 3.2 Results

Analyzing the information collected, we obtained the following results:

- Virtually all the companies carry out CSR activities, although we only found 6 retailers that explicitly expressed that they have developed CRM campaigns. So CRM is not the most used CSR activity by distribution organizations in Spain.

This result coincides with Diaz’s (2013) results, which neither highlight CRM as the main CSR activity in Spain. Instead, the development of awareness campaigns (e.g. about nutrition, consumption, environment, etc.), and cooperation in humanitarian aid or emergency campaigns stand out as main CSR actions.

- Out of the 23 analyzed CRM campaigns, 15 belonged to Carrefour. Therefore, we can say that Carrefour is the leading retailer in this type of CSR initiatives in Spain.
- Some companies develop CRM campaigns directly, while others, such as Carrefour and Ikea, prefer to do them through their own Foundations.
- NGOs that collaborate with retailers in Spain are varied. They range from local NGOs to international NGOs, although the ones that operate nationwide stand out. The most requested NGO was the Food Bank.

This is coherent, because there is a close relationship between the company (e.g. a supermarket), the cause (e.g. avoiding malnutrition), the donation (e.g. food for people in need), and the NGO (e.g. Food Bank).

- Companies maintain a long-term relationship with some NGOs, developing several campaigns during the year, or repeating these campaigns in successive years (e.g. the Food Bank, the Spanish Red Cross ...).
- Causes are also varied. The most outstanding ones are those related to diseases (e.g. autism, cerebral palsy, rare diseases, etc.) and food (providing food to people in need). Unlike other

Table 3 Main CRM campaigns carried out by retailers in Spain

Company	NGO	Campaign	Comments
Lidl	SOS Children	‘Solidarity Turrón’ (2011)	LIDL donated 5 cents to SOS Children per each DOR ‘turrón’ sold.
	Food Bank	‘Solidarity Turrón’ (2012)	LIDL donated 100 g. of food to the Food Bank per each DOR ‘turrón’ sold.
Carrefour (Foundation)	Spanish Federation of Food Banks	‘Kilo Operation’ (2 times per year)	Per each kilo donated by consumers, Carrefour donated another one.
	Local Food Banks	‘The Solidarity Kilometer’ (2013)	For each kilometer cycled by citizens (Carrefour installed bicycles at various points), Carrefour donated 1 kilo of food. Thus, if they manage to finish a fictitious 3 km. stage, Carrefour made an additional contribution (10 kilos of food).
	ASPACE (Confederation of care entities to cerebral palsy in Spain)	‘Solidarity Dinner Service’ (2008 & 2009)	By selling an exclusive dinner set, 4 Euros (from selling price) were for the project; and by selling a breakfast set or a kit of glasses and cups, 2 Euros.
	Different local NGOs	‘We create illusions together’	Sale of adhesives and bright hangings to personalize mobile phones
	Confederation Autism Spain & Spanish Federation of Parents of Persons with Autism	‘Get on Board for Autism’ (2007, 2008 & 2009)	Selling a collection of 155 Mortadelo & Filemon’s comics (1 Euro from the sale of each copy was to the project).
	Spanish Federation of Neuromuscular Disease	Preparation and publication of the Guide about Neuro-muscular Disease: information and support to families (2008)	By purchasing 2 paperbacks (of any Edition), the citizen could buy a ‘solidarity’ book for 1 Euro more.
	Spanish Federation of Spina Bifida and Hydrocephalus Associations	‘Spina Bifida in School’ (2008 & 2009)	By purchasing any children’s movie, customers could acquire one of the ‘solidarity’ Lunnis for 1.5 Euros more.
		‘A book for a dream’ (since 2009)	Sale of an exclusive collection of 30 Disney titles (1 Euro from sale price was allocated to the project).
	Spanish Red Cross	‘Solidarity back to school’ (September, since 2009)	Carrefour donated the same amount of school supplies that customers had given.
	Make-a-Wish*Ilusiones Spain Foundation	‘Make a wish’ (2010)	By selling each ‘Solidarity’ Walt Disney DVD, 1 Euro was allocated to the project.
Spanish Association Against Cancer	‘Link to life’ (2010)	By purchasing 2 paperbacks, Carrefour donated 1 Euro to the program.	

	Spanish Federation of Cystic Fibrosis	'Give them air' (2011)	By purchasing 2 paperbacks, Carrefour donated 1 Euro to the program.
	Down Spain	'Do Tic Down' (since November 2012)	By the sale of the Sunrise Solidarity bracelet, 1 Euro was allocated to the program.
	Bocalan Foundation	'Solidarity Footprints' (2013)	Bear puppies for sale.
	Spanish Federation of Rare Diseases	A Nuco, a Hope' (2013)	By purchasing a Nuco (a Teddy from Famosa), the profit (1 Euro) was allocated to this initiative.
El Corte Ingles	Spanish Federation of Food Banks	'Who says books do not feed'	A percentage of the paperback sales was allocated for the NGO.
		National Campaign of the Food Banks (November 29-30, 2013; several times in 2014)	Collection of food purchased by its customers.
Cortefiel Group	Children's Hearts	'Congenital Heart Disease Conference' (2013)	Profits from sales of children's books (Tina's books, by Araceli Segarra) were allocated to the NGO.
Eroski	Food Bank / Unicef / Intermon Oxfam	'Solidarity Reusable Bag'	The entire profits from the sale of this bag (1 Euro) were allocated among three charitable projects.
Ikea (Foundation)	Save the Children / Unicef	'Soft toys for education' (November – December, since 2003)	1 Euro for every soft toy sold, for these NGOs.
	UNHCR	'LED light bulbs' (February 3 – March 29, 2014)	For each LED bulb sold, Ikea Foundation would donate 1 Euro to the NGO.

Source: Research results

sectors (e.g. cosmetics – see Galán et al., 2004), the cancer does not appear as the main disease in such campaigns.

- The most common product linked to these campaigns is food (this is a specific feature of this sector). It is followed by toys, books and DVDs.
- With regard to the available information, Carrefour has been the company that has provided the most complete information, both through its website and via email. However, other companies did not provide any information.

Anyway, more information could have been provided in all cases. This is a key to transparency and, in turn, to the success of the CRM campaign.

- Generally, the website is the preferred means by businesses to provide information about CRM campaigns they carry out. The information provided at the point of sale (posters, volunteers) is also important.
- In these campaigns, the donation has been sometimes monetary and sometimes in kind (for example, when food is donated to Food Banks). For monetary donations, the amount ranges from 5 cents (Lidl) to 4 Euros (Carrefour). But the most repeated amount is 1 Euro.
- A particular time does not stand out to carry out these campaigns, although November and December are the most repeated months.

This is also a difference from other sectors, which are especially focused on the Christmas period (Galán et al., 2004).

- It is usual for consumers to assume, partially or entirely, the cost of the campaign. For example, individuals are usually those who pay an additional amount for the cause, or who buy food for the Food Bank.

This is not so common in other sectors (e.g. the financial sector), where companies usually pay the donation to the cause.

#### 4. Conclusions

Throughout these three decades of existence, CRM has grown rapidly. It has experienced a great diversification, reaching almost all sectors and incorporating new technologies (e.g. SMS, websites, social networks, etc.). Its influence on consumer perceptions and buying habits can provide a competitive advantage (based on differentiation).

Our descriptive study has revealed that CSR, in general, and CRM, in particular, are becoming a usual strategy for retailers. Carrefour, through its own foundation, is the distribution company that has carried out the most CRM campaigns in Spain. Information about CRM initiatives is usually offered on retailers' websites, and also at the point of sale. It is common for consumers to pay the cost of the campaign (partially or entirely) in this sector. Different NGOs collaborate with retailers in Spain. The most outstanding causes are related to diseases and food for people in need. In addition, donation is sometimes monetary, and sometimes in kind.

Some considerations and managerial implications for these companies are derived from these findings. As the corporate motives can be questioned, CRM programs should be credible. Credibility can be achieved by ensuring consumers that the company has not increased the product price or has not reduced the product quality. Also, showing that the program is not an image 'washing', there is a long-term commitment, and codes of conduct are observed. And, of course, transparency, that is, providing complete information about CRM campaigns.

The creation of their own foundations by businesses has been sometimes criticized. Firms are accused of creating them to develop socially responsible actions themselves without having to submit to the NGOs' demands (Galán, 2013). Consequently, retailers that have their own foundations should take

care of this aspect and demonstrate that their goal is not to avoid the external control of NGOs.

The retailer role is critical in many CRM campaigns. Retailers must take special care to promote the campaigns at the point of sale, offering specific and sufficient information about the current CRM programs. They have to complement and highlight the information that should already appear on the packaging and / or labeling of the solidarity products, and reinforce the generally favorable consumer attitudes toward CRM.

Although the majority of companies could develop and implement a CRM initiative, according to different authors (see, for example, Kotler and Lee, 2005), those that have a greater chance of success are those products with large mass markets, with large customer bases, and large and well established channels. Hence the distribution companies are one of the best positioned to participate in these programs.

Other studies (e.g. Galán and Galera, 2014) showed that companies can choose among a wide range of causes, but it is important that the cause be consistent with the company, the NGO, and the product linked to the CRM program. Again, causes chosen by retailers are usually coherent (e.g. food = Carrefour + Food Bank).

Consequently, CRM should be considered by companies for the numerous associated benefits: it can influence consumer attitudes and behavior, enhance the image and corporate reputation, increase customer satisfaction and loyalty, increase sales and benefit society at the same time. Then, CRM should become indispensable in the current competitive environment, as an important source of competitive advantage.

Finally, we consider that the collaboration and involvement of retailers in CRM campaigns are essential to be a success. For example, in the case of large stores or supermarkets, information, promotion and attractive presentations of the CRM campaigns at the point of sales (e.g. with posters, volunteers, ...), the availability of the solidarity product in the stores (with sufficient stocks to satisfy the demand), visibility, space and place on the shelves, close to the cash desk, etc. could be decisive to encourage consumer participation in the CRM campaign, by allowing the possibility to work with a particular NGO, and even participating in different initiatives simultaneously. Moreover, retailers sometimes take

the initiative, participating directly in such campaigns with their own brands (store brands).

All research studies have boundaries and limitations, and this study does as well. Although our data collection methodology is appropriate for our study, and ANGED is the most important and representative retail association in Spain, this is not enough. We need to continue looking for other associations to complete our list, because there are many SMEs that do not belong to ANGED and they have adopted CSR activities.

It was by definition not a random sample; that is, each member of the population did not have an equal probability of being asked to participate in our study. The generalization of our findings, then are limited to the extent that our sample is unrepresentative of the general population with respect to characteristics that would have moderating effects on our findings.

To conclude, we propose the development of new studies and other research related to CRM. For example, we believe it would be interesting to repeat

the study at the international level, making a comparison among countries. We could compare CRM applied by Spanish retailers with CRM applied by others (mainly, in Anglo-Saxon countries, or in other European ones) to observe the possible cultural influence (e.g. contrasting individualistic and collectivist cultures, because cultural values can influence consumer attitudes toward CRM and subsequent behavior).

Thus, future research is needed to better understand CRM campaigns in the retail sector. We hope, therefore, that future research will build upon this study and further expand our knowledge in this sector. As studies that analyze the role of commercial distribution companies in CRM are still scarce, we specifically propose to study such campaigns more in depth and along two streams: (1) retailers as key partners in successful CRM campaigns (from a relationship marketing approach), and (2) retailers as companies that take the initiative and lead CRM campaigns (a more comprehensive analysis of the CRM programs carried out in Spain, including other companies that do not belong to ANGED).

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#### (ENDNOTES)

- 1 In 1983, the American Express campaign to collaborate in the Statue of Liberty restoration (donating one cent for every transaction made with the credit card anywhere in the country, and one dollar for every new credit card issued) was the first to be called 'cause-related marketing'. However, a year earlier, the company had already made a similar campaign to extend the use of the credit card, but only in San Francisco (the donations were made to various local arts organizations).
- 2 ANGED is the Spanish acronym.
- 3 'Turrón' is a typical Spanish Christmas sweet. DOR is a LIDL's brand store.

M. Mercedes Galán – Ladero  
Clementina Galera – Casquet

## ULOGA TRGOVACA NA MALO U MARKETINGU OPĆE DOBROBITI: OSVRT NA ŠPANJOLSKI SLUČAJ

### SAŽETAK

Marketing opće dobrobiti (cause-related marketing - CRM) danas je jedna od najvažnijih inicijativa društveno odgovornoga poslovanja (corporate social responsibility - CSR). Njegova najvažnija karakteristika je to da je korporativna donacija uvjetovana prodajom, odnosno da CRM u konačnici ovisi o ponašanju potrošača.

U ovome radu usredotočit ćemo se na programe i primjenu CRM-a u određenoj gospodarskoj grani: sektoru distribucije. Cilj nam je razumjeti temeljne značajke ili praksu tih programa u sektoru distribucije u Španjolskoj, istražiti ulogu trgovaca na malo i njihov mogući utjecaj na ponašanje potrošača kako bi poduzeća mogla unaprijediti te kampanje i poboljšati svoj uspjeh.

Rad je organiziran na sljedeći način. Na početku rada razmatra se konceptualni okvir CRM-a na kojemu se temelji teorijski dio ovoga rada. Potom se na osnovi popisa poduzeća udruženih u najreprezentativnije maloprodajno udruženje u Španjolskoj - Nacionalno udruženje velikih distribucijskih poduzeća (National Association of Large Distribution Companies - ANGED), promatramo situaciju u Španjolskoj i analiziramo glavne kampanje trgovaca tijekom posljednjih godina. Informacije su prikupljene s mrežnih stranica svakoga od tih poduzeća, traženjem dodatnih objašnjenja putem e-pošte te pretraživanjem interneta. Nakon toga slijedi prezentacija i rasprava o glavnim rezultatima, sažetak najvažnijih zaključaka, kao i teorijska razmatranja i implikacije na upravljanje. Jedan od najvažnijih zaključaka ukazuje na utjecaj trgovaca na malo na ponašanje potrošača i njihovu ključnu ulogu u uspjehu programa CRM-a. Na kraju rada navode se moguća ograničenja istraživanja i ističe potreba za daljnjim istraživanjem.

**Ključne riječi:** marketing opće dobrobiti, trgovci na malo, ponašanje potrošača, društveno odgovorno poslovanje

*Ilija Nedić*  
*Tena d.o.o. Osijek*  
*M. A. Reljkovića 7,*  
*31000 Osijek, Croatia*  
*iljko.nedic@gmail.com*  
*Phone: +38598372005*

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# **BREAK-EVEN POINT IN SUGAR-BEET PRODUCTION**

## **ABSTRACT**

World sugar consumption has been recording a steady growth in the past 70 years and, according to all relevant estimates, it will continue to grow also in the next decade, which puts sugar in the category of the most significant foods and commodities in the world.

Of the total world sugar production, around 77% is derived from sugar cane and 23% from sugar beet. Brazil has been the world leader in sugar production for a long period of time, producing white sugar from sugar cane only, whereas the leader in the production of sugar derived from sugar beet is the EU-28.

When the Republic of Croatia joined the EU, the Croatian sugar industry became part of the single European sugar market, so the break-even point was used in the research to determine the competitiveness level of the Croatian sugar beet production.

Based on the expected selling price of sugar beet amounting to EUR 34 per ton of standard quality sugar beet, and using the break-even method, it was determined that the quantity required to cover total costs in sugar beet production in the Republic of Croatia amounts to 55.26 tons per hectare of payable sugar beet, standard quality, i.e. 8.84 tons of polarized sugar per hectare. As the average sugar beet production in the Republic of Croatia, expressed in the equivalent of polarized sugar, amounts to 7.8 tons per hectare, it is obvious that an average Croatian producer of sugar beet, without income from subsidies, operates at a loss.

**Keywords:** Break-even point, sugar, beet, cane

## **1. Introduction**

The irrefutable truth is that in the modern world there is no developed society or developed economy without a developed agriculture. Therefore, it may well be concluded that the situation in agriculture is the best indicator of the overall situation in a society, particularly its abilities to efficiently utilise available resources and competitive advantages.

By observing Croatian agriculture and key indicators of production, import, export, and the develop-

ment level of rural areas, unfortunately, a conclusion can be drawn that in the past twenty years the Republic of Croatia was unable to provide even the basic prerequisites (for example, formulating the agricultural strategy, establishing long-term land policy, irrigation, zoning, financing scheme, etc.) to use available resources. Despite huge resources invested in agricultural subsidies and preferential trade status with the European Union in the period 2005-2013, today we have mostly unorganised, non-competitive production and devastated rural areas. Such a situation in agriculture, of course, cannot

and must not be observed separately from the situation in the society as a whole, and certainly one should take into account war events (a great part of population left rural areas; direct war damages), as well as an overall lack of adequate monetary and fiscal policy.

The recent accession of the Republic of Croatia to the European Union resulted in the obligation of adapting the Croatian agricultural policy according to the Common Agricultural Policy of the European Union<sup>1</sup>, so it will be extremely difficult to compensate for everything that we have failed to do in the past twenty years, particularly in the conditions of the open EU market. One of the more important CAP segments at the EU level is certainly the sugar market order<sup>2</sup> that represents a continuation of the sugar market order in the EU, in force since 1968.

A developed sugar industry has been present in the Republic of Croatia for more than a century. Having been through the transition and privatisation process and owing to special trade agreements with the European Union<sup>3</sup>, in the period from 2006 to the present the Croatian sugar industry has recorded good business results and provided the leading position in the export balance of the Croatian food industry<sup>4</sup>. However, the decision to lift the production restrictions in the sugar sector, adopted at the EU-28 level and coming into effect in 2017, makes one wonder how this decision will affect Croatian sugar factories, what is the future of this industry and, consequently, of sugar beet production in the Republic of Croatia.

To answer these questions, the break-even point was applied to determine the required level of sugar beet production per hectare, at which revenue is equal to costs, i.e. the break-even point in sugar beet production in the Republic of Croatia. In addition, competitiveness of the Croatian sugar industry was compared with other EU-28 states. The data used as the default values were historical data on the achieved level of yield measured in tons of polarized sugar per hectare, projections of expected future prices of sugar beet in the EU-28<sup>5</sup>, as well as real costs of sugar production of selected, representative sugar beet producers in the Republic of Croatia, who are successful sugar beet producers in terms of cost effectiveness.

## 2. Definition of the break-even model

Any business venture can produce a profit only when its total revenue exceeds its total costs. In the event that costs exceed revenue, the venture will generate a loss. A whole array of economic models is available for determining whether a venture or a product generates gain or loss. One of the simplest tools for assessment of economic feasibility of a venture or a product is the break-even analysis.

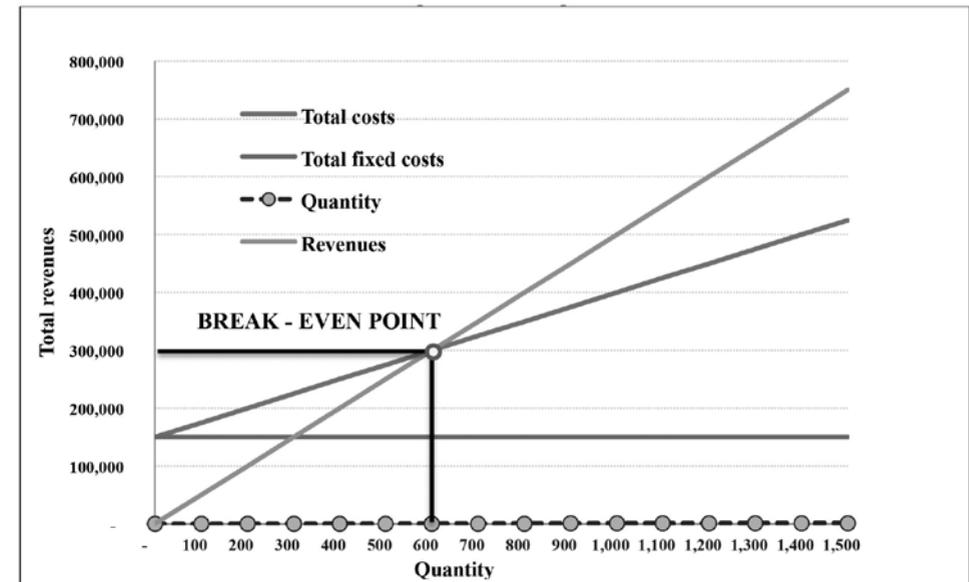
Although it is a fairly straightforward indicator, the break-even point is relatively underused in the available literature and research papers. The intention of this paper was to demonstrate the simplicity of use of this tool and to motivate other authors to employ this type of analysis in their research more frequently.

The break-even point is the level of business at which total revenues are equal to total costs. The term "break-event point" arises from the graphic interpretation of this model, because the break-even point is at the intersection of total revenues and total costs, thus reflecting the level of revenue and quantity of products required to reach the break-even point. Understandably, at this point, where total revenues and total costs become equal and intersect, a company or a product for which the break-even point is being determined generates neither loss nor gain.

The break-even point may be expressed in units of products (quantity) or revenue. Simply put, for a particular product it can be determined that the break-even point will be reached by selling, for example, 600 units of this product at an annual level. It can also be determined that, for example, total revenue amounting to 300,000 will provide the rentability threshold, i.e. at this revenue level the company's revenues and costs will be equal, thus the company will be operating at no profit or loss (Graph 1).

It is clear that any sale of the product above the quantity defined by the break-even point (in our example more than 600 units) will generate profit, whereas any sale below the break-even point will generate loss. The same applies to revenue: if revenue is higher than the amount determined by the break-even analysis (in our example more than 300,000), profit is generated, and if revenue is below the amount determined by the break-even point, loss is generated.

Graph 1 Break-even point



Source: Author

The method used to calculate the break-even point is quite simple, which is the key advantage of this model. However, the key disadvantage of this model is that it presumes a linear revenue growth, meaning that the company sells products at the same price and that it has the same sales structure and the product mix regardless of the sales volume and time dimension, as well as a linear change of total cost of the product regardless of the production volume.

## 3. Sugar production and consumption

Observed at the global level, sugar consumption has recorded significant growth in the past seventy years, from 24 million tons in 1940 to 163 million tons estimated for 2011. Asian countries, primarily India and China, account for the most significant part of the world sugar consumption, although in terms of per capita consumption, these are still the areas with the lowest sugar consumption.

According to current estimates, sugar production and consumption in the world is expected to grow by 1.9% per year in the period until 2023<sup>6</sup>.

Consumption growth will be most pronounced in the areas where sugar consumption is below the global average, primarily in China and India, but also in Indonesia and Africa.

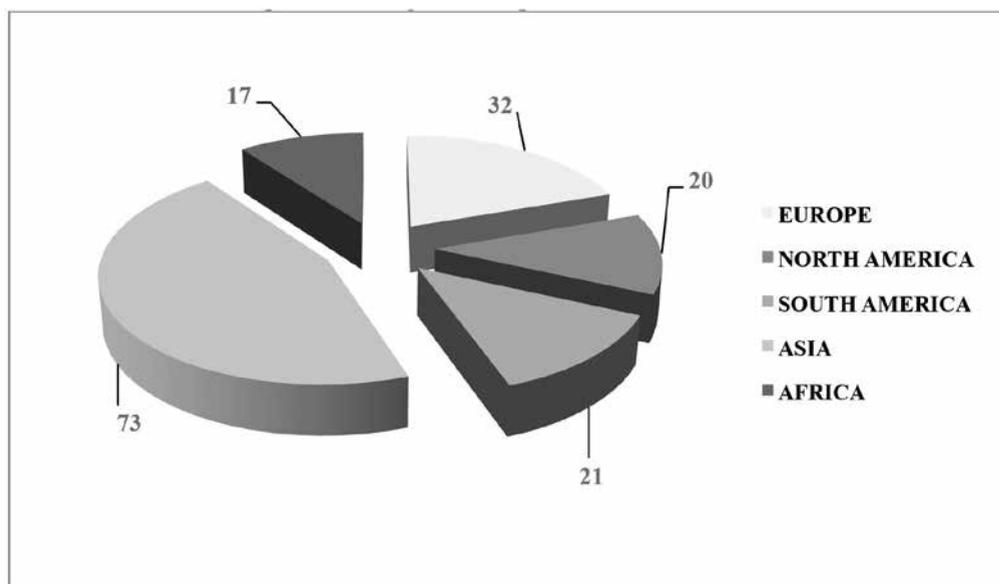
Regarding sugar production, today's sources are sugar cane and sugar beet. Depending primarily on climate conditions, 9 countries of the world produce sugar from both sugar cane and sugar beet, whereas sugar derived from sugar cane only is produced in 71 countries, and sugar derived from sugar beet only is produced in 43 countries of the world.

Observed at the global level, sugar cane is used as raw material for production of 77.1% of the total produced sugar (data for marketing year 2011/2012), and the remaining 22.9% of sugar is produced from sugar beet.

The world sugar production is dominated by Brazil, China, India, the EU and Thailand. In the marketing year 2013/2014 together they produced around 102 million tons of sugar, or 58.5% of the world sugar production.

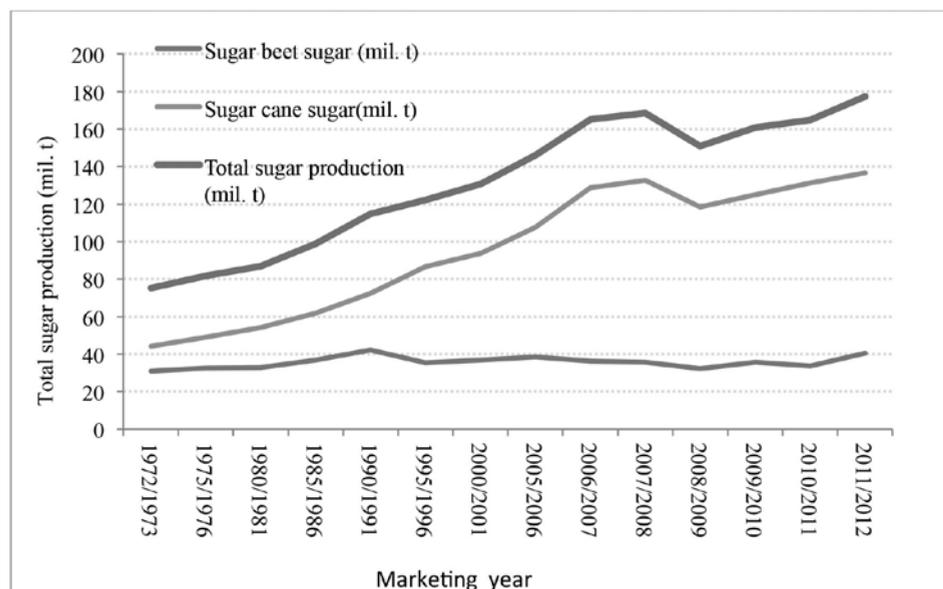
It is interesting to look at the sugar production and consumption balance by countries and regions (Table 1).

Graph 2 World sugar consumption in million tons – 2011



Source: Author

Graph 3 World sugar production 1972 – 2011



Source: Author

Table 1 Sugar production and consumption by country/region (000t) - 2013/2014

Country/Region	Production	Consumption	Importer (-)/ Exporter
Argentina	1,780	1,850	-70
Australia	4,400	1,218	3,182
Brazil	37,800	11,260	26,540
Canada	100	1,131	-1,031
China	14,263	16,500	-2,237
Colombia	2,300	1,565	735
Cuba	1,600	740	860
Dominican Republic	561	390	171
Egypt	2,013	2,870	-857
European Union-28	16,010	18,300	-2,290
Guatemala	2,852	764	2,088
India	26,605	26,000	605
Japan	750	2,154	-1,404
Mexico	6,383	4,543	1,840
Other Caribbean	190	425	-235
Other Central America	2,700	1,330	1,370
Other East Asia	65	2,382	-2,317
Other Europe	684	984	-300
Other Former Soviet Union	2,133	3,542	-1,409
Other Middle East	1,530	8,588	-7,058
Other North Africa	400	3,219	-2,819
Other Oceania	240	361	-121
Other South America	3,370	4,597	-1,227
Other South Asia	335	2,962	-2,627
Other Southeast Asia	4,165	10,439	-6,274
Other Sub-Saharan Africa	5,976	10,017	-4,041
Pakistan	5,215	4,450	765
Philippines	2,450	2,200	250
Russia	4,400	5,615	-1,215
Thailand	11,333	2,600	8,733
Turkey	2,300	2,320	-20
United States	7,672	11,084	-3,412
Others	2,435	1,895	540
<b>World</b>	<b>175,010</b>	<b>168,295</b>	<b>6,715</b>

Source: United States Department of Agriculture, Economic Research Service, World production, supply, and distribution, centrifugal sugar, According to: <http://www.ers.usda.gov/data-products/sugar-and-sweeteners-yearbook-tables.aspx#25440/> (Accessed on: February 24, 2015)

According to Table 1, Brazil, Thailand, Australia, Guatemala and Mexico are major suppliers of sugar in the world market, as their sugar production exceeds their sugar consumption.

### 3.1 Sugar production from sugar cane

The dominant role in production of sugar from sugar cane, but also in sugar production in general, is played by Brazil. This country currently produces around 40% of the world's sugar cane, grown on the area of 9.5 million hectares, and it accounts for 21.6% of the total world sugar production<sup>7</sup>. Here, one should bear in mind that a significant share of sugar cane in Brazil is used for ethanol production. Depending on trends in ethanol price (i.e. oil prices) and sugar, the Brazilian sugar industry changes the proportion of sugar cane used for ethanol production or sugar production.

Table 2 Key production figures – Brazil

Brazil	Marketing year	
	2012/2013	2013/2014
Sugar cane production (mil. tons)	532	597
<b>Sugar cane used for production of:</b>		
Sugar	49.54%	45.22%
Ethanol	50.46%	54.78%
Produced sugar (mil. tons)	34.10	34.30
Produced ethanol (billion litres)	21.36	25.58
Yield (litre of ethanol/ton of sugar cane)	79.57	78.18
Yield (kilo of sugar/ton of sugar cane)	129.38	94.72

Source: Unica, Final report of 2013/2014 harvest season<sup>8</sup>

Hypothetically speaking, if the total quantity of sugar cane had been processed into sugar, sugar production in Brazil in the marketing year 2013/2014

would have amounted to 56.55 million tons.

It should be kept in mind that only 70 million hectares of the total 850 million hectares in Brazil, or less than 9% of the total available area, is used for production purposes. In its projections of trends in sugar cane production, UNICA<sup>9</sup> envisages growth by the marketing year 2020/2021 to 1,200 million tons (double the current production level). Taking into account the usual ratio between sugar cane used for ethanol production (55%) and sugar cane used for sugar production (45%), this means that sugar production in Brazil, depending on trends in sugar cane yield and digestion (sugar content), should reach the level between 50 and 60 million tons per year. As it is expected in the same period that the world sugar consumption will grow by a total of 30 million tons, i.e. from the current 170 million tons to around 200 million tons, it is obvious that a good part of the expected production increase will be covered by Brazil. Depending on oil price trends, but also on investments in new processing capacities, the ratio of ethanol and sugar production in Brazil may vary to a significant extent and it will certainly have a key impact on the future situation in the global sugar market.

### 3.2 Sugar production from sugar beet

Sugar beet is grown in the northern hemisphere, on the area of around 5 million hectares, in areas with mild and moderate climate conditions. World sugar beet production is dominated by Europe, which accounts for more than 75% of the world production of sugar derived from sugar beet, and, observed by countries, by Russia, Ukraine, the USA, Germany, France, Turkey, China and Poland. In 2011 these eight countries accounted for 94% of the world sugar beet production.

To fully understand the market potential of the countries producing sugar from sugar beet, it should be pointed out that, except France, none of the countries have a significant sugar surplus in the market, which by no means reduces the importance of sugar quantities produced from sugar beet, because it is used to substitute import of sugar produced from sugar cane.

Table 3 World sugar-beet sugar production - 2011/2012

Country/Region	Planted area of sugar-beet		Sugar-beet sugar production		Tons of sugar / ha of the sugar-beet
	Ha	Share in the world area (%)	Tons	Share in the world production (%)	
EU - 27	1,540,000	30.4%	17,988,766	48.5%	11.80
Russia	1,210,000	23.9%	5,545,000	15.0%	4.58
Ukraine	532,000	10.5%	2,000,000	5.4%	3.76
Turkey	329,000	6.5%	2,300,000	6.2%	6.99
USA	450,000	8.9%	4,235,000	11.4%	9.41
Others	1,000,000	19.8%	5,000,000	13.5%	5.00
<b>Total</b>	<b>5,061,000</b>	<b>100.0%</b>	<b>37,068,766</b>	<b>100.0%</b>	<b>7.32</b>

Source: Food and Agriculture Organization of the United Nations (2012), According to: <http://faostat.fao.org/site/339/default.aspx/> (Accessed on: February 24, 2015)

Information about sugar quantity produced per hectare from Table 3 also shows the competitiveness level in sugar production derived from sugar beet at the national level. The presented data indicate full domination of sugar beet producers from the EU-28 member states.

### 3.3 The sugar sector in the EU

As the Republic of Croatia became a full member of the European Union in July 2013, the Croatian sugar market also became part of the single European sugar market.

The production of sugar beet and sugar in the EU is regulated by sugar market orders<sup>10</sup>, existing in various regulation forms and degrees since 1968<sup>11</sup>. Significant reforms have taken place on several occasions during that period. Among more recent ones is the reform adopted on 24 November 2005, referring to the period from 1 July 2006 to 30 September 2015. After negotiations with the World Trade Organisation (WTO) in Doha<sup>12</sup>, the reform had the following results at the EU level:

- Removal of the intervention price of EUR 631.9 per ton of white sugar and introduction of the reference price, which had to be reduced by the

marketing year 2009/2010 to the level of EUR 404 per ton of white sugar.

- Reduction of the minimum price for sugar beet from EUR 43.63 per ton to EUR 26.3 per ton by the marketing year 2009/2010.
- The current "A", "B" and "C" sugar production quotas were united in a single production quota, which initially amounted to 18.5 million tons of white sugar.
- As the sugar price in the European market was then significantly higher than the price of sugar which had preferential access to the EU market since 1 July 2009 as a result of Doha negotiations (mostly raw sugar from Least Developed Countries (LDC) and African, Caribbean and Pacific Group of States (ACP)), a new production compensation for white sugar was introduced, used for funding the programme for reduction of sugar production in the EU. The Commission's estimates were that the annual sugar surplus at the EU level would amount to around 6 million tons and for this reason a stimulation programme was launched to reduce sugar production in the EU. The programme encompassed the period from the marketing year 2006/2007 to the marketing year 2009/2010. Its financial value was EUR 5.7 billion and it envisaged a compensation in the amount of EUR 750 per ton of white sugar in 2006/2007, gradually decreasing until 2009/2010, when the compensation amounted to EUR 520 per ton of white sugar for all sugar factories that closed down (and physically destroyed, dismantled) all their facilities. To compensate for the

negative impact on sugar beet producers, in May 2007 the Commission also introduced additional stimulation payments for sugar beet producers through the Single Payment Scheme.

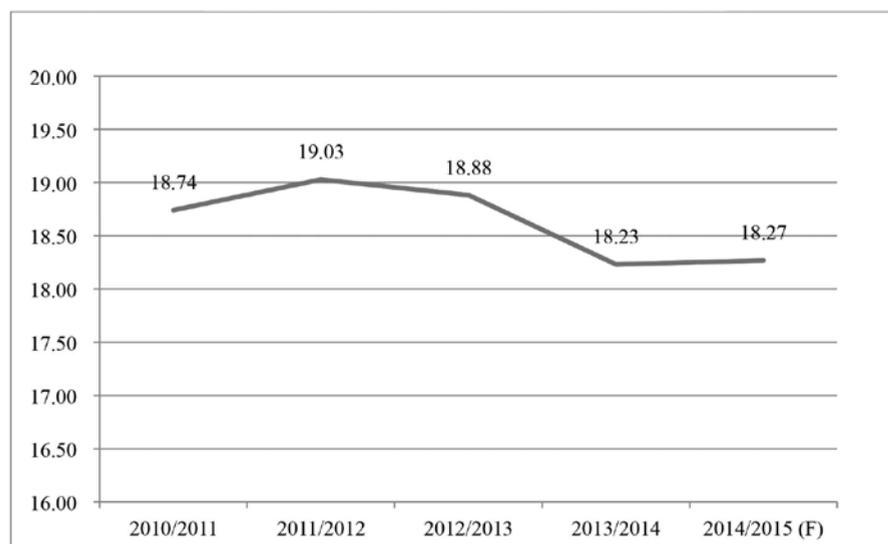
In the end, the entire reform resulted in the reduction of processing capacities by 60%, achieved by closing down 83 sugar factories in the EU, reducing production quotas by 30% or 6 million tons of sugar per year, and establishing a production quota for white sugar derived from sugar beet in the EU-28 at the level of 13.5 million tons per year.

### 3.3.1 Sugar consumption in the EU-28

According to the official data provided by the relevant body of the European Commission<sup>13</sup>, as of 30 September 2014, sugar consumption in the EU-28 in the past four years ranged between 18 and 19 million tons per year.

Of the total sugar consumption in the EU, industrial consumers account for 70%, whereas household consumers account for 30% of production.

Graph 4 Sugar consumption in EU-28 (mil. t)



Source: Author

Observed by the origin of sweeteners, about 5% of the EU-28 needs are covered by isoglucose, 17% is sugar derived from sugar cane (through import of raw sugar) and the remaining 78% is sugar from sugar beet. According to FAO, sugar consumption in the EU is at the level of 39.13 kg per capita, which, taking into account imports and exports of products containing sugar, corresponds to the projections shown in Graph 4.

### 3.3.2 Sugar market supply in the EU-28

After the 2006 sugar market reform, in a very short period of time the EU-28 has gone from the second largest world exporter of sugar (after Brazil) to the second largest importer of sugar in the world (after Russia). The annual sugar import in the EU-28 is between 3-4 million tons per year, 90% of which is sugar, and 10% is sugar in processed products.

The structure of imported sugar in the marketing year 2013/2014 is dominated by sugar originating from ACP and LDC countries (over 70% of imported sugar), which is imported without any quantity or customs restrictions. The remaining raw sugar (from Brazil, Columbia, Peru) within so-called CXL quota is imported with import duty of EUR 98 per ton of raw sugar.

Table 4 Balance of sugar in EU-27 - 2012/2013 (000 t)

Description	Quota sugar	Out-of- quota sugar
Beginning stocks	1,595	
Production	14,597	
Sugar produced from sugar-beet	13,995	4,908
Transfer of out-of-quota sugar into quota sugar	602	(602)
Total import	4,158	
Sugar	3,635	
Processed goods	523	
<b>Total available</b>	<b>20,350</b>	<b>4,306</b>
<b>Consumption</b>	<b>16,575</b>	
<b>Consumption - industry</b>		<b>2,302</b>
Total Export	1,281	1,335
Sugar	63	
Processed goods	1,218	
Ending stocks	2,494	669
<b>Total exit</b>	<b>20,350</b>	<b>4,306</b>

Source: AGRI C5, European Commission, Sugar trade statistics, 10/2014

### 3.3.3 Production of sugar from sugar beet in the EU-28

Any additional sugar quantity outside the TRQ system<sup>14</sup> can be imported to the single EU-28 market only with customs duties, which are EUR 339 per ton of raw sugar and EUR 419 per ton of white sugar, making sugar imported in this way entirely uncompetitive in the EU-28 market.

Table 4 shows that total sugar production from sugar beet at the EU-27 level in 2012/2013 amounted to 18,903,000 tons of sugar from sugar beet (13,995,000 tons/quota sugar + 4,908,000 tons/out-of-quota sugar). Total consumption was 18,877,000 tons of white sugar (16,575,000 tons + 2,302,000 tons) and it was covered by the beginning stocks of 1.6 million tons of sugar produced from sugar beet and the remaining 2.68 million tons were covered from processed raw sugar.

As we have seen so far, the single EU-28 sugar market is predominantly (78%) covered by sugar produced from sugar beet in one of the nineteen EU-28 member states where sugar is produced from sugar beet. As the EU-28 was the second largest exporter of sugar in the world until the latest sugar market reform in 2006 and today it is the largest sugar importer in the world, along with Russia, the European Commission and the European Parliament decided to completely abolish production quotas for sugar produced from sugar beet within the EU-28, starting on 1 October 2017, and gradually allow liberalisation of sugar import and export. This fact is of particular importance for the Croatian sugar industry, which, after having entered the single EU-28 sugar market recently, will again face great market challenges in a few years. Its readiness for the challenges ahead will depend on a variety of circumstances, but in the end mostly on the competitiveness of the local sugar beet production.

Table 5 Sugar-beet sugar production in EU-28

Marketing year	Planted area of sugar-beet (ha)	Polarisation sugar (t/ha)	Quota production (tons of sugar-beet sugar)	Total production (tons of sugar-beet sugar/year)	Out-of-quota sugar-beet sugar (t/year)
2007/2008	1,722,000	10.3	13,336,741	15,836,930	2,500,189
2008/2009	1,474,000	10.8	13,336,741	15,236,909	1,900,168
2009/2010	1,535,000	11.7	13,336,741	17,505,338	4,168,597
2010/2011	1,519,000	10.3	13,336,741	15,429,140	2,092,399
2011/2012	1,524,000	11.8	13,336,741	18,743,490	5,406,749
2012/2013	1,497,000	11.3	13,336,741	17,366,485	4,029,744
2013/2014	1,512,000	11.1	13,529,618	16,818,855	3,289,237
2014/2015 (F)	1,560,000	12.2	13,529,618	19,070,194	5,540,576

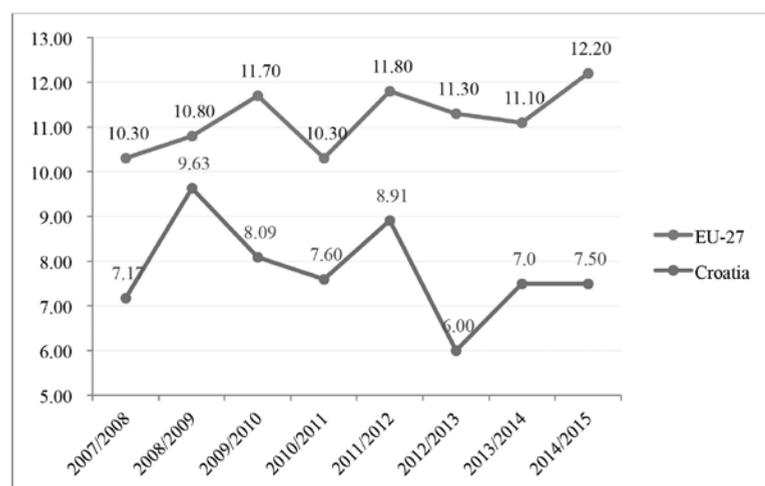
Source: Author

Within the EU-28, sugar derived from sugar beet is produced in nineteen member states according to the current production quotas, which, after Croatian accession to the EU, amount to 13,529,618 tons of white sugar from sugar beet<sup>15</sup> and 720,441 tons of isoglucose per year. Sugar beet is grown on about 1.5 million hectares, which combined with the average production of 11-12 tons of sugar per hectare gives 17 million tons (the average in the past eight marketing years).

Therefore, although there are production restrictions, Table 5 shows that production of sugar from sugar beet in the EU-28 exceeded the production quota in each marketing year following the 2006 reform by an average of 3.6 million tons.

More detailed insight in the production of sugar from sugar beet is provided in Table 6, according to which the production of sugar from sugar beet in the EU-27 in the marketing year 2012/2013 was dominated (12 million tons) by five member states, namely France, Germany, Poland, Netherlands and the UK.

Graph 5 Sugar yield (tons/ha of sugar beet) in Croatia and EU-28



Source: Author

Table 6 Production of sugar-beet sugar in EU-27 - 2012/2013

Member state	Quota for sugar-beet sugar production (tons/year)	Planted area of sugar-beet (000 ha)	Yield of sugar (tons/ha)	Total sugar-beet sugar production (tons)	Out-of-quota sugar produced (tons/year)
Belgium	676,235	63	12.1	761,533	85,298
Czech Republic	372,459	52	10.9	565,462	193,003
Denmark	372,383	41	11.7	480,366	107,983
Germany	2,898,256	350	11.4	4,006,872	1,108,616
Greece	158,702	9	5.9	158,126	-
Spain	498,480	36	14.8	531,845	33,365
France (Metropolitan)	3,004,811	341	12.4	4,222,847	1,218,036
France (DOM-Overseas)	432,220	-	-	412,164	-
Italy	508,379	52	10.5	546,362	37,983
Lithuania	90,252	19	7.6	190,253	100,001
Hungary	105,420	18	6.4	111,959	6,539
Netherlands	804,888	73	13.3	968,459	163,571
Austria	351,027	49	9.6	469,024	117,997
Poland	1,405,608	192	9.4	1,803,332	397,724
Portugal (Acores)	9,953	-	-	358	-
Romania	104,689	28	9.2	258,621	153,932
Slovakia	112,320	19	11.8	228,698	116,378
Finland	80,999	12	6.2	140,460	59,461
Sweden	293,186	38	9.6	365,869	72,683
United Kingdom	1,056,474	104	11.0	1,143,875	87,401
<b>Total EU-27</b>	<b>13,336,741</b>	<b>1,496</b>	<b>11.3</b>	<b>17,366,485</b>	<b>4,059,971</b>

Source: Author

The average sugar production per hectare in these five countries amounts to 11.6 tons, which is above the average level of the EU-27.

These five leading countries in the production of sugar from sugar beet are situated in the northern or north-western part of Europe, with favourable climate conditions for this crop. This primarily refers to extreme temperatures that are typical of the south-eastern Europe in July and August, when night temperatures often exceed 20 °C, causing sugar beet to stop growing and to start producing new leaves<sup>16</sup>, resulting in the end in low sugar beet yield per hectare and low sugar content (digestion).

If sugar yields per hectare in the Republic of Croatia and the EU-28 are compared in the past eight years, significant deviations may be observed, which are extremely unfavourable for Croatian sugar beet producers in terms of their competitiveness.

The calculated eight-year average of sugar yield per hectare in the Republic of Croatia in the observed period is 7.80 tons per hectare, whereas in the EU-27 it is significantly higher, amounting to 11.19 tons per hectare, i.e. 43% higher than in the Republic of Croatia.

Consequently, the difference in sugar beet yield per hectare implies the difference in (lower) revenue per hectare between sugar beet producers in

**Table 7 Cost calculation of sugar-beet production in Croatia – 2012/2013**  
(Case study: Agrotovarnik d.o.o. Tovarnik, Croatia)

Number	Cost	Unit cost -HRK/hectare of sugar-beet
1	Seed	1,456.75
2	Plant protection means	2,062.03
3	Fertiliser	2,457.30
4	Manure	1,291.79
5	Other materials	140.39
<b>I=(1+2+3+4+5)</b>	<b>Cost of materials</b>	<b>7,408.25</b>
6	Heavy tractor costs	709.24
7	Heavy tractor connected machine costs	97.45
8	Medium heavy tractor costs	586.75
9	Medium heavy tractor connected machine costs	154.86
10	Harvester costs	707.38
<b>11 (6+7+8+9+10)</b>	<b>Company machines costs</b>	<b>2,255.68</b>
12	External machine services	394.57
<b>II = (11+12)</b>	<b>Total machine costs</b>	<b>2,650.25</b>
13	Department overheads	1,201.40
14	Company overheads	1,218.82
<b>III=(13+14)</b>	<b>Total overheads</b>	<b>2,420.22</b>
15	Transport services	19.76
16	Samples control services	66.94
17	Land rent costs	541.95
18	Other costs	61.46
<b>IV=(15+16+17+18)</b>	<b>Total other costs</b>	<b>690.10</b>
19	Cost of permanent employees	533.12
20	Cost of temporary employees	694.55
<b>V=(19+20)</b>	<b>Total cost of workforce</b>	<b>1,227.66</b>
<b>I+II+III+IV+V</b>	<b>Total production costs</b>	<b>14,396.48</b>
<b>Average yield of payable sugar-beet in Croatia, standard quality (16% sucrose content) in tons/ha</b>		<b>48.74</b>
<b>Total cost in HRK per ton of sugar-beet standard quality</b>		<b>295.37</b>

Source: Author

the Republic of Croatia and the EU-27. To generate the same revenue per hectare, the sugar beet price for sugar beet producers in the Republic of Croatia should be 43% higher than the price for producers in the EU-27 or they should receive higher

subsidies (additional payment for sugar beet). It is clear that the higher price of sugar beet for producers in the Republic of Croatia means higher price per ton of sugar produced by the Croatian sugar factories, which would deteriorate the sustainability

of this industry in the long run. Related to subsidies, additional payment for sugar beet will amount to EUR 6.5 million starting in 2015, which, based on the average area planted with 23,000 hectares of sugar beet in Croatia, presents additional payment in the amount of EUR 283 per hectare. Ten of the EU-28 states have additional payments for sugar beet and Croatia is in the eighth position by the amount of additional payments. A lower level of additional payments can only be found in the Czech Republic (EUR 267 per hectare) and Finland (EUR 70 per hectare).

The previously determined eight-year average yield per hectare of 7.80 tons in the Republic of Croatia, based on standard digestion of 16%, means the yield of (7.8t/16%=) 48.75 tons of payable sugar beet per hectare.

### 3.4 The break-even point in sugar beet production in the Republic of Croatia

In order to determine the competitiveness of the Croatian sugar beet production, costs of producing a ton of standard quality sugar beet should be determined first.

Although as a rule, costs of material or machine work are in direct correlation with the production volume and variable in their nature, in our example they are expressed as unit costs, because for the needs of this research they are observed at the level of one hectare, which is used as a basic production area.

In the above mentioned report<sup>17</sup>, the reference price of sugar beet in 2020, i.e. after the new market order in the EU-28 becomes fully operational, is estimated at EUR 34 per ton of standard quality sugar beet (16% digestion) in the post quota sugar sector, starting from 1 October 2017.

By applying the midpoint exchange rate of the Croatian National Bank on 25 December 2014, the following result is obtained: EUR 34.00 x 7.661973 = HRK 260.51, which would be the selling price of sugar beet.

To achieve a production cost coverage presented in Table 7, the required yield would be 55.26 tons of payable sugar beet of standard quality per hectare:

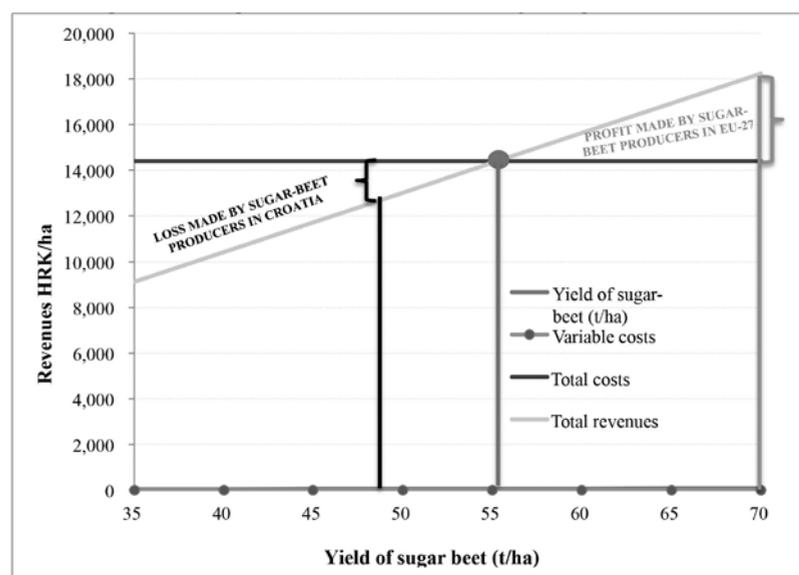
$$TP(kp) = \frac{295.37}{260.51} = 1.133826 \times 48.74 = 55.26 \text{ tons of sugar beet/ha}$$

To obtain comparable data, it is presumed that there are no revenues from subsidies (regional payment and additional payment) and that production costs per hectare of sugar beet are the same as at the EU-28 level<sup>18</sup>. As shown in Graph 7, an average producer in the EU-28, with equal production costs, generates a profit amounting to HRK 3,787 per hectare of sugar beet. At the same time and under same conditions, an average sugar beet producer in the Republic of Croatia generates a loss of HRK 1,700 per hectare of sugar beet. The reason for such a big difference lies solely in the yield per hectare of sugar beet. Both producers implement all the required agrotechnical measures, they have similar labour and machinery costs, but in the end, due to different yields, they have completely different business results.

To assess the competitiveness of the Croatian sugar industry, we should certainly bear in mind the technological level of the Croatian sugar factories, but even more importantly their capacity, given that fixed costs (amortisation, full-time workers, CAPEX) account for about 50% of total costs. The average daily processing capacity of the Croatian sugar factories is around 6,330 tons per day per factory (Osijek 7,000 tons; Županja 6,000 tons; and Virovitica 6,000 tons), with average campaign duration being 90 days, which means that in a usual average 90-day campaign the Croatian sugar factories process around 1.7 million tons of sugar beet per year.

The average capacity in the remaining EU-28 states (106 sugar factories) is 9,143 tons of sugar beet per day per factory, or overall 941,697 tons of sugar beet per day, with average campaign duration being 120 days. The total quantity of sugar beet bought by sugar factories in the EU-27 was around 100 million tons in the past few years, whereas the average quantity of sugar beet in the EU-25 before the last sugar market reform in 2006 amounted to 127 million tons per year.

Graph 6 Break-even point measured in volume (tons) of sugar-beet per hectare in Croatia



Source: Author

#### 4. Conclusion

Sugar beet has a dominant role in the cost price of a ton of white sugar. Available calculations of the major sugar producers in the EU-28 (Table 6) show that the cost of sugar beet processing amounts to EUR 150 per ton of white sugar, and the share of sugar beet in a ton of sugar is calculated based on 86% utilisation, which means that a ton of white sugar requires  $(1,000\text{kg}/(16\% \text{ digestion} \times 86\% \text{ utilisation})) = 7.267$  tons of standard quality sugar beet. If the forecasted price of sugar beet is EUR 34 per ton, this means that the participation of sugar beet in a ton of white sugar is  $(7.267 \text{ tons of sugar beet} \times \text{EUR } 34 \text{ per ton}) = \text{EUR } 247$ , i.e. around 62% of total costs ( $\text{EUR } 150 + \text{EUR } 247 = \text{EUR } 397$  per ton) of white sugar production.

According to the conducted research, it can be concluded that sugar production per hectare in the Republic of Croatia is lower (-43%) in comparison to the remaining members of the EU-28, as are the installed daily processing capacities per sugar factory per day (-44%). With the average yield being 7.8 sugar per hectare and without subsidies, Croatian sugar beet producers generate loss in this production segment (the break-even point expressed as the quantity of products is at the level of 55.26 tons

of sugar beet of standard quality per hectare) and, consequently, they produce only 1.12 million tons of sugar beet, which is sufficient for all Croatian sugar factories to work only 59 days in a year. All this greatly increases the costs of sugar production and makes the Croatian industry in its current form vulnerable and even unsustainable in the long run, particularly after 1 October 2017.

Additional payment per hectare based on the envelope amounting to EUR 6.5 million per year, which comes into force with the marketing year 2015/2016, will not influence the competitiveness of the Croatian sugar beet production to a more significant level by itself. On the contrary, as the current price of white sugar in the single EU-28 market is below EUR 400 per ton, and with this year's expected production in the EU-28 amounting to extremely high 19 million tons of sugar derived from sugar beet, the price of sugar beet in the following few years will probably have to be lower than the forecasted EUR 34 per ton. Given that the current additional payment per hectare of sugar beet is around EUR 180, and the average area under sugar beet in Croatia in the past few years has been 23,000 hectares, at the price of EUR 40 per ton of payable sugar beet, standard quality, it is quite realistic to assume that the decrease in the price of sugar beet will result in a reduction of areas planted with sugar beet in the Republic of Croatia, which are insufficient as it is.

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**(ENDNOTES)**

- 1 Common Agricultural Policy – CAP.
- 2 Single Common Market Organisation for Sugar (CMO Sugar).
- 3 Stabilisation and Association Agreement, Official Gazette – International Treaties No. 14, 27 December 2001, which came into force on 1 February 2005.
- 4 According to the Croatian Chamber of Economy, Sector for Agriculture, Food Industry and Forestry, exports of the sugar industry in 2011 amounted to 185 million USD, or nearly 20% of total exports in this sector.
- 5 Joint Research Centre Institute for Prospective Technological Studies; EU sugar policy: A sweet transition after 2015?
- 6 OECD and FAO Secretariats; <http://www.oecd.org/site/oecd-faoagriculturaloutlook/sugar.htm/> (January, 2015).
- 7 According to: <http://www.unicadata.com.br/> (January, 2015).
- 8 Ibid.
- 9 Brazilian sugarcane industry association.
- 10 Common Market Organization for Sugar.
- 11 European Sugar Sector, 2005., Mariann Fischer Boel, Commissioner for Agriculture and Rural Development.
- 12 9th Round of multilateral trade negotiations, launched in November 2001, in Doha, Qatar, at the WTO's Fourth WTO Ministerial Conference.
- 13 Committee for the common organisation of agricultural markets.
- 14 During the WTO's Uruguay Round, members agreed to a tariff rate quota (TRQ) system as the most appropriate method to ensure market access during the transition from an agricultural trading system of complex tariffs and nontariff barriers to a tariffonly regime.
- 15 The annual production quota for Croatia of 192,877 tons of white sugar derived from sugar beet should be added to the quotas shown in Table 6.
- 16 According to: [http://www.kws.de/aw/KWS/serbia-montenegro/\\_e\\_erna\\_rfb/Bolesti\\_secerne\\_repe/~dcvn/Cercospora\\_Beticola/undefined/](http://www.kws.de/aw/KWS/serbia-montenegro/_e_erna_rfb/Bolesti_secerne_repe/~dcvn/Cercospora_Beticola/undefined/) (January, 2015).
- 17 See endnote 1.
- 18 The cost structure in sugar beet production is such (a large proportion of the costs is incurred by plant protection materials, fertilizers and machinery) that given the single economic area, there is not much variation in the prices of these inputs, and thus also not in sugar beet production costs at the EU-28 level.

Ilija Nedić

**TOČKA POKRIĆA U PROIZVODNJI ŠEĆERNE REPE****SAŽETAK**

Potrošnja šećera u svijetu u zadnjih 70-ak godina bilježi stabilan rast koji će se po svim relevantnim procjenama nastaviti i u sljedećem desetljeću, a što svrstava šećer u kategoriju najznačajnijih prehrambenih i burzovnih roba na svijetu.

Od ukupne svjetske proizvodnje šećera oko 77% čini šećer proizveden iz šećerne trske, a 23% šećer proizveden iz šećerne repe. Vodeće mjesto u svjetskoj proizvodnji šećera, već duže vrijeme drži Brazil s proizvodnjom bijeloga šećera proizvedenoga isključivo iz šećerne trske, dok među proizvođačima šećera iz šećerne repe, vodeće mjesto u svijetu drži EU-28.

Kako je domaća industrija šećera od ulaska Republike Hrvatske u EU dio jedinstvenoga europskoga tržišta šećera, u istraživanju se primjenom Metode točke pokrića utvrdila razina konkurentnosti domaće proizvodnje šećerne repe.

Na bazi očekivane prodajne cijene za šećernu repu od 34 EUR/t šećerne repe standardne kakvoće primjenom Metode točke pokrića, utvrđeno je da potrebna količina za pokriće ukupnih troškova u proizvodnji šećerne repe u Republici Hrvatskoj iznosi 55,26 tone/ha plative šećerne repe, standardne kakvoće, odnosno 8,84 tone polarizacijskog šećera po hektaru. S obzirom da prosječna proizvodnja šećerne repe u RH iskazana u ekvivalentu polarizacijskoga šećera iznosi 7,8 t/ha jasno je da prosječni domaći proizvođač šećerne repe, bez prihoda od poticaja, ostvaruje gubitak u ovoj proizvodnji.

**Ključne riječi:** točka pokrića, šećer, repa, trska

**Jerko Glavaš**  
Josip Juraj Strossmayer  
University of Osijek  
Faculty of Economics in Osijek  
Trg Ljudevita Gaja 7,  
31000 Osijek, Croatia  
jglavas@efos.hr  
Phone: +38531224400

**Damir Šebo**  
Josip Juraj Strossmayer  
University of Osijek  
Faculty of Medicine  
Josipa Hutlera 4,  
31000 Osijek, Croatia  
dsebo@mefos.hr  
Phone: +38531512819

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**Luka Stanić**  
Merkur osiguranje d.d.  
Ivana Gundulića 5,  
31000 Osijek, Croatia  
luka.stanic@merkur.hr  
Phone: +38531215444

# **THE IMPACT OF THE MANAGERS' EDUCATIONAL LEVEL ON THE DEVELOPMENT OF THE KNOWLEDGE-BASED ORGANIZATIONS: THE CASE OF INSURANCE COMPANIES IN CROATIA**

## **ABSTRACT**

The key objective of the scientific research paper is to identify the key factors of knowledge management that have a direct impact on the economic growth of the national economy within the framework of the European Union. Through the implementation of primary research in the insurance sector (insurance companies), named variables are analyzed to create a model of competitiveness in terms of the knowledge economy based on the above research and proven hypotheses in the research conducted. An analysis of the results is necessary to determine the most important groups of variables that affect the economic growth and competitive advantage. The research is based on three key variables: education, knowledge and human resources.

**Keywords:** Management, education, knowledge, insurance, Croatia

## 1. Introduction

Gaining knowledge produces knowledge spill-over effects. The knowledge that is acquired, helps in acquiring additional learning skills further on which facilitates the acquisition of new knowledge in the future (Čerić, Varga, 2004). Due to this effect, the use of the company's knowledge often results in externalities since the beneficial effects are not only being used by the knowledge owners or the knowledge holders, but also the companies and individuals in the business environment that did not have to deal with any of the costs associated with the achievement of positive effects.

Economic theory has four inputs or factors of production: labor, capital, property and entrepreneurship. It is said that entrepreneurship is an active factor, and the others are passive ones. (Ferenčak, 2003)

The experience of the countries with a tradition of entrepreneurship has pointed to the necessity of continuous learning and the importance of the interaction among the environment and the company, because:

- People and the organizations with the fastest and most successful learning, in the long-term always beat the competition precisely through searching and exploring new opportunities,
- The political, social and economic environment may encourage or discourage a potential entrepreneur,
- The entire educational system should become more aware of the needs and importance of entrepreneurs (Learner-centered instruction, just-in-time learning, permanent education),
- Organizational management is a key factor for encouraging knowledge sharing and exchange of experience, additionally creating the models of the organizational learning.

Unlike traditional goods and services, the use of knowledge does not reduce its quantity and that is an important difference. It is the law of scarcity itself, as one of the basic laws of economics and the basis of traditional economic goods that is not applicable to knowledge.

The failure to establish market knowledge has resulted in two additional properties of the knowledge itself:

1. The very fact that the specific market knowledge doesn't exist, means that there isn't any mechanism for the price formation of specific knowledge. It is important to emphasize that the knowledge has its certain value, although it is not possible to express what that price would be. The value of the knowledge is not easily identifiable, and its determination is possible only after using it.
2. Owning multiple units of the same knowledge does not increase the total knowledge that is available since the same knowledge can be expanded and collapsed depending on the medium or the storage method.

## 2. Knowledge as a driver of change

Every national economy and its competitive advantage depend on the quality of their own human resources. The use of the above resources and investment into their quality are the main factors of development. A quality education system, more precisely education itself, is an important participant when it comes to enhancing the competitiveness of the national economy through the provision of the necessary quality and quantity of human capital, as the main resource of progress. Education is essential in all this because it enables the acquisition of knowledge, skills, attitudes and values necessary for an individual to fulfill his or her job and social role in all segments of everyday life.

In the last decades, intangible assets such as knowledge, patents and innovations have been identified as key sources of wealth and prosperity (García-Ayuso, 2003).

Since knowledge promotes national economic growth and has a significant impact on future national value and innovations, both learning and gross domestic product (GDP) represent the fount of a nation's competence and capabilities that are deemed essential for economic growth, competitive advantage, human resource development and quality of life (Malhotra, 2003).

Consequently, countries rich in intangible assets are the leaders in the national wealth more than those countries whose assets are limited to land, labor and capital (Malhotra, 2003).

The development of information and communication technologies has significantly reduced operating costs and also has facilitated interaction for knowledge exchange, which has become a fundamental factor in the production of goods and services. For material productivity, to produce something old (already perfected) is no longer relevant. Instead of that, something new has become more important and for that, knowledge is necessary (Sundać, Švast, 2009).

Knowledge brings profit to the business system and provides prosperity of the national economy. Short-term goals of the business systems are still based on making a bigger income by minimizing expenses, i.e. to achieve the greatest possible profit. It is no longer possible to achieve that in the classical way, but through the creation of added value using intellectual capital, retaining loyal customers (20% of the customers create 80% of the income), increasing the value of brand names, as well as introducing the collective knowledge management in the business systems and collecting data. In this way, a competitive advantage at the national and global level would be achieved and maintained. The share of intangible assets (knowledge in its various manifestations) in the final products or the companies' and corporations' total market value frequently indicates a higher growth rate.

Nowadays, literature accompanied by neoclassical economic theories, for the most part is actually focused on the knowledge-based economy, while the knowledge society itself is viewed as a by-product of the knowledge-based economy because it is very difficult to define some of the aspects, such as: the political, sociological, cultural and other as-

arise from their uniqueness and rarity. Even though no explicit price is set for the knowledge in the market, knowledge has a value in itself and that value just keeps growing.

Having that in mind, professor Velimir Srića emphasizes two basic types of learning that, not only affect the business strategy, but are also the result of the latter (Knežević, 2007: 159):

1. Learning to survive - based on their own and others' mistakes, following the relevant sources of commercial, scientific, financial and other information, an individual or an organization creates the presumption of survival by removing errors and making behavior adjustments in the environment.
2. Learning to create (it is also called generic learning) - it is a higher phase of learning that aims at creating something new or at further improving the already existing solutions, and results in the active participation of individuals and organizations in changing their environment.

In today's business conditions, in terms of a knowledge-based society, it is precisely the creation of new knowledge and the use of the existing knowledge, in addition to continuous innovation, that have become an imperative in order to achieve a competitive advantage in the market. Nonaka and Takeuchi introduce a simple model that shows the components on which the competitive advantage of today's operating system is based. The model is also focused on knowledge.

Figure 1 The source of competitive advantage



pects, whereas in the knowledge-based economy the sharing of knowledge-based sectors in the national economy can be measured (Švarc, 2009: 43).

In the knowledge society, the human intellect, cognition and knowledge have intrinsic values that

Source: Adapted from Nonaka, I., Takeuchi, H. (1995). *The Knowledge Creating Company*. Oxford: Oxford University Press. p. 6

A few changes have been made from 1995 until today, but the initial setting has remained (Figure 1).

The knowledge economy or knowledge-based economy is a term that refers to the application of knowledge. The goal of the knowledge-based economy is to achieve the economic benefit - profit.

The knowledge economy is best described by Peter Drucker in his book "The Effective Executive" in 1966 (Drucker, 2002). Drucker makes a comparison between the manual worker and the knowledge worker:

- The manual worker works exclusively with his or her hands and produces goods or services, while
- The knowledge worker works with his or her head, not hands, and produces ideas, knowledge, and information

The fundamental concept of this notion is that knowledge and education today are treated as a business product, as well as a product of innovative intelligence.

The cause of the transformation of a traditional economy into a knowledge-based economy can be partly seen from the following:

- With the help of advanced technology, products are becoming more, almost completely global and the globalization of the market is omnipresent,
- Great effect of the information and communications technology (ICT), efficient production is based on technological progress and knowledge,
- More than 70% of workers in developed countries are "knowledge workers".

"The key values of today's leading 'New Economy' companies (eg. Microsoft), are not related with the physical capital, but with the knowledge, that is, intellectual capital. The information era has spawned IT as a companies' strategic resource and it has also imposed necessary information (IM) and knowledge management (KM), along with the companies' intellectual capital, in order to achieve and maintain a competitive advantage. Tracking information and information flows have changed the organizational structure, while the use of new technologies in business has changed the market environment itself" (Srića, Spremić, 2000: 186).

In the new economy, business location becomes less important because the modern methods and

technologies are the ones creating virtual stores and organizations and also offering advantages in terms of the rate of performing certain actions and faster availability of the products and services.

It should be also mentioned that the knowledge which is the foundation of the new economy is not subject to geographical, legal or other barriers, instead, it is obtained where it is needed. The products and services based on knowledge compete very well with the products and services that include embedded know-how.

Continuous change (re-everything) is a feature of the new economy that represents redefining strategies at all times, business objectives and the way of doing business. It also requires faster time cycles within which knowledge is generated and procedures that are based on newly generated knowledge. The fact is that investing in people, creating new knowledge and managing the employees' intellectual potential, makes the competitive environment of the new economy where the knowledge is the main product and also the object of buying and selling. In accordance with all stated above, the business system management (in this case the insurance company) must be focused on creating an appropriate environment that will facilitate learning how to use our own knowledge in the business system and ultimately, enable and create a knowledge management system.

### 3. Innovation as a factor of competitiveness

The European Union today is a major supporter and promoter of the innovation policy, which can be seen in a series of activities that are focused on monitoring, improving and benchmarking national innovation policies, enterprises' innovation capacity, competitiveness, etc. The Lisbon Agenda was based on the ideas of the institutional and evolutionary economics of the new innovation paradigm that emphasizes the interaction of science, education and the economy (the research triangle) for the development of innovation and overall economic growth (Švarc, 2009: 92).

In order to monitor achievement of the Lisbon agenda and the development and exchange of information on innovation policies in the European Union and beyond, the European Commission launched an innovation portal in January 2001 (Eu-

ropean Commission, 2000), which consisted of four components:

1. The Trend Chart on Innovation in Europe;
2. The enterprises' innovation capacity measurements (Community Innovation Survey - CIS);
3. The evaluations of the innovative capability of the EU countries (European Innovation Scoreboard - EIS);
4. The views of European managers (Innobarometer).

Innovation, i.e., applied and commercialized knowledge is the one element that connects knowledge and economic growth. Integration of science and entrepreneurship (the real sector) is becoming a new driving force for progress.

Speaking of models, it should be noted that the linear model sees the innovation as the last phase of the research process. The process starts with basic research and is followed by product development. The cycle ends with the market exploitation of the research results, that is, innovation. In this part, the innovation process develops successively (in chronological stages) from research to commercial application. The key factor for the economic and technological development is the state's investment in research and development, especially in basic sciences, as the implicit factors of development (Švarc, 2009: 105).

On the other hand, there is the interactive model, as a contrast to the linear model. According to this model, the innovation cannot be equalized with "research". The linear model includes a series of interconnected activities. In the center of the latter is an industrial design (the prototype).

Innovation can be developed at any point in the innovation cycle, also the research and development don't necessarily need to be included. Moreover, incremental innovations, that is, continuous improvement of an invention after the implementation phase, can be economically much more important than the initial invention in its original form (Švarc, 2009: 283).

Since the linear model has been replaced with an interactive model, science (especially at the universities) is experiencing drastic changes in its social concept and economic role. Generally speaking, due to the interactive model, science is losing its monopoly position ("first driver" of the technologi-

cal innovation). The linear model could not, for example, explain the growth of Asian countries like Japan that did not have a developed science, and in accordance with that, it is being considered outdated and "primitive" as a model for technological progress (Abramovitz, 1989: 352). Instead, market and market demand are seen as a key variable that determines the dynamics of innovation. The pressure of achieving a national competitive advantage is putting academic science in a difficult situation and having to defend its social and economic value. Accordingly, if the technology is not applied science, then what is the use of public science and publicly funded universities? Public investments in the university science are becoming counterproductive, moreover, the characteristics of atrophic, immobile, insufficiently pragmatic and expensive institutions that have lost touch with reality are being attributed to the universities.

Nevertheless, a companies' technological and innovative capacity plays a crucial role in the economic growth, and the objectives of national development policies are strongly being focused on producing mostly applied, technological knowledge, the so-called technology without science. The dynamic, globalized environment conditions the drastic changes that the above process has only started.

Globalization is here, it represents everyone's reality, but what does it actually stand for? We can define it as "the process of efficient use of world resources (labor, land, capital and knowledge) against competitors by hiring a multicultural workforce" (Carrell et al., 2000: 29).

Thanks to globalization, new actors have emerged on the scene – multinational companies. Those companies have a significant influence in a globalized world with domination and the establishment of strong financial groups. "In a global economy, the economies of scale are no longer important. Barriers for the market entrants are related with the production of high value and quality, not with the scale (Karaman Aksentijević et al., 2008). "In the knowledge economy human resources must be educated, innovative, creative, communicative, responsible and cooperative, and they should have a high-level of technology knowledge and understanding of the environment.

Unlike the traditional economy, the knowledge-based economy is based on information as a basic resource and human resources as the fundamental

Table 1 The traditional economy as opposed to the knowledge-based economy

	Feature	Traditional economy	Knowledge economy
Macro level	Level of competition	National competition	Global competition
	Source of competitive advantage	Low cost, differentiations, focus	Knowledge, innovation, quality
	Key growth drivers	Cheap labor force, capital	Knowledge, ideas, innovation, technological structure
	Key trends in technology	Mechanization, automatization	Digital communication, virtualization
Micro level	Prevalent form of organization	hierarchical, bureaucratic	Entrepreneurial, networked
	Organization of production	Mass production	Flexible production adapted to the customers' requirements
	Importance of research and management knowledge	Low	Key source of competitive ability

Source: Karaman-Aksentijević, N., Ježić, Z., Đurić, K. (2008)

value. National laws, taxes and market cease to have only national features, instead, they are becoming part of the wider global context.

Practice shows that companies with a developed relationship to human resources have better financial results. Furthermore, created human resource strategies encourage maximally the use and development in order to increase further business success. The quality of the company is reflected in translating the paradigm from "human resources cost" to "human resources are an investment". Thus, with a joint venture of the companies in the continuing education of its employees on the one hand, and the return of the investment by the workers with newly-acquired knowledge and skills on the other hand, productivity is being increased, also influencing an increase in the competitive advantage.

The only sustainable company's source of competitive advantage is hiring and retaining quality workers, and constantly improving their knowledge, the ways the knowledge is used and how quickly the latter is gained. In order to ensure maximum return on investment in human resources, it is necessary to have an investment plan in accordance with the business strategy.

But the real challenge is not only to be more competitive in the global market, rather than to create a global way of thinking along with managers, employees and human resources professionals. Free trade and globalization have led the majority of companies into the "wild" competitive market, where success depends on the quality of the companies' human resources. The range of human resources has been expanded and it includes recruiting, training and motivating the labor force from different cultural backgrounds.

The question that arises is: can the human resources strategy and employee development system in one country be effective in another?

The answer can be sought in the assumptions that affect the business in every country such as: law, politics, economics and culture of life and work. All this leads to a different way of thinking, understanding and behaving as well as different management and business methods. It is not possible to replicate only a particular way of managing human resources, because the assumptions that affect the business (especially those related to the culture of life and work), have a great influence on the way of doing business itself (Kolar, 2010: 10).

#### 4. Impact of economic crisis on the development of a knowledge society

The high unemployment rate is derived from the violation of the main postulates. Those postulates are related to business systems which are based on knowledge. People are the ones who make a difference, the competitive advantage. The problems and the consequences caused by crisis can be primarily neutralized by additional investment in people - employees who have the skills and knowledge to adapt to the new circumstances.

Every business system in Croatia must be able to identify those factors, invest in them and encourage creativity and innovations or otherwise, face even bigger problems - elimination of the competition due to lack of competitiveness.

World experts on intellectual capital agree on one thing - improving the knowledge flow within the business system and transforming that knowledge into value creates a new added value and competitive advantage.

In fact, the previous claims show the influence factors that have alienated Croatia from the actual concept of the knowledge-based society in the following period:

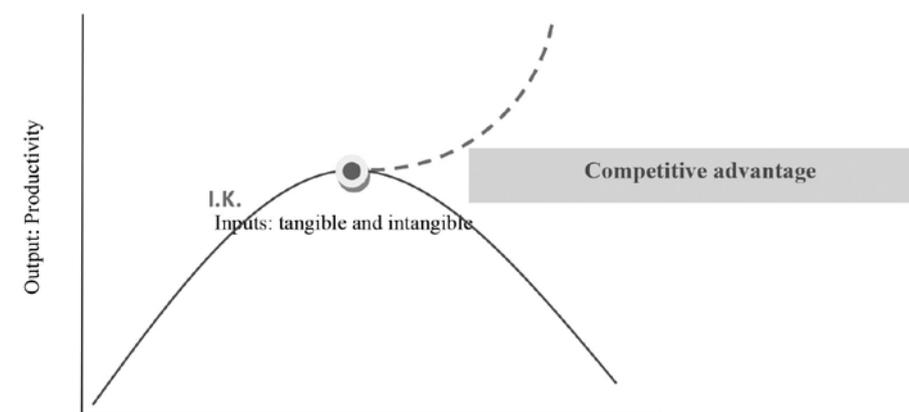
- Reducing the actual expenditures in science and education;

- High unemployment rate;
- Decline in economic activity accompanied by a constant rise in prices, undermined living standards (compared to last year) and negatively impacted the growth of poverty in Croatia and the number of citizens who are living close to the poverty line;
- Accepting the guidelines of the European Commission without a thorough implementation (education reform, knowledge society, a European Strategy for smart, sustainable and inclusive growth).

Accordingly, the Croatian reality is a great reminder of how important the transformation of consciousness is in transitional societies. Moreover, the transformation should happen first, because it is an actual basis for all other political, economic and cultural transitions, i.e. concretization of capitalism. However, the situation today is reversed. Institutions and laws, property and production are some of the elements that have obtained a capitalist form, but not the content. This is due to the "centralized - planning" consciousness of the citizens (security and continuity, collectivity and individual irresponsibility). They deciphered the freedom (in capitalist terms) as the freedom of the national identity (Šundalić, 2004).

It is possible to achieve the competitive advantage, but the intellectual capital must be introduced as a source (Sundać, Švast, 2009). The law of increasing returns affects the intellectual capital and not the law of diminishing returns (Graph 1).

Graph 1 The relationship between intellectual capital and the law of increasing returns



Source: Adapted and Updated: Sundać, D., Švast, N. (2009)

“High-tech industries” with a high proportion of knowledge (and low proportion of intangible assets) in the final product have developed due to the influence of science and technology in recent decades. The main feature of these industries is the actual effect of the law of increasing returns. In other words, the law of diminishing returns is the key for Croatian economy and its way out of the economic crisis.

Certain consequences of the crisis in Croatia that have become visible have left a lasting impact on the economy, the standard of living and on foreign investors. One of the possible solutions to resolve this problem would be to dramatically increase investment in the national intellectual capital through all the possible models (intangible > tangible).

It is important to emphasize one thing - the investment structure in Croatia has not been encouraged. Most of the investments here were earmarked for the infrastructure. Speaking of high unemployment and stagnating exports, the investments in the industrial structure and knowledge were supposed to be a priority, since they have the largest multiplier effect on the overall economic growth.

Therefore, an investment in knowledge pays the best interest in many ways and results with: a growth of jobs, the competitiveness of Croatia in the European context, a better living standard, social peace and other, previously mentioned segments. The only constant should be greater investment in knowledge and the education system. All the other variables depend on the implementation of tacit knowledge in the economic sector, the latter of which should be revitalized and based on the targeted investment policies with an important objective – higher job-creating economic growth (Glavaš, 2012).

### 5. Case study: Insurance companies in Croatia – questionnaire-based survey

The definition of insurance helps to explain the very concept of insurance. Many theorists have tried to define this idea. Manes defines the insurance as an “economic institution resting on the principle of mutuality, established for the principle of supplying a fund, the need for which arises from chance occurrence whose probability can be estimated.” (Muller-Lutz, 1966). There are different types of insurance, but each one of them implies payments of

a certain fund (Muller-Lutz, 1966).

Furthermore, all of them could be essentially reduced to: “Insurance is risk transfer mechanism that ensures full or partial financial compensation for the loss or damage caused by event(s) beyond the control of the insured party.” Under an insurance contract, a party (the insurer) indemnifies the other party (the insured) against a specified amount of loss, occurring from specified eventualities within a specified period, provided a fee called premium is paid. In general insurance, compensation is normally proportionate to the loss incurred, whereas in life insurance usually a fixed sum is paid.

The insurance management emerges as a service that provides protection in case of a probable but uncertain event that would mean a certain loss for the insurer and reduction of possible earnings. Each type of insurance must define the following: the object of the insurance, the risks associated with an object that is ensured, the period of time that an insurance policy provides coverage and the form of damage cover (Stanić, Glavaš, 2013).

An essential characteristic of every manager is the ability to manage other people, including himself. It is very important to know how to manage individuals and groups, as well as having the necessary communication skills. Various skills and knowledge are needed for a successful performance of such a complex operation, such as: technical skills (the application of specific professional knowledge acquired through training and experience), the art of dealing with people, the ability to work with others, understanding, motivation and the ability to analyze and diagnose complex situations.

#### 5.1 Research methodology

The methodology and technology of the scientific and professional work allows efficient and rational management of our own knowledge, but also the knowledge of others (i.e. human resources management) and management related to integrated theoretical and practical methods (especially, converting a good idea into quality work) (Zelenika, 2000).

The phenomenon of the management impact on the development of insurance products as a basic competitive advantage, so far, has not been explicitly discussed in Croatian literature.

The second part of the methodological activity is related to a questionnaire-based survey (systematically planned, conducted and analyzed) regarding the role and importance of management in the development of insurance products.

#### 5.2 Survey assumptions

Survey assumptions in this paper are based on several basic assumptions:

- The impact of the management of insurance companies on the development of new insurance products or the improvement of already existing ones, so far, has not been discussed in the literature;
- The successful operation of the insurance company depends primarily on the management (it coordinates all the internal and external factors of a business success),
- Taking care of human resources is not a matter of choice, but questions the need and necessity for achieving a competitive advantage and unquestionable future business.

#### 5.3 The sample and the analysis of the results

The online survey with multiple choice questions was conducted by the authors with the objective to collect data on the perception of management related to the role and influence of certain factors on the development of the new products in insurance, and also the improvement of already existing ones.

Using the scientific method survey, the research was conducted on existing insurance companies in Croatia (18 insurance companies). Out of 18 insurance companies the authors received 10 feedback questionnaires (respondents). Data was collected during the period between September and October 2014.

The responses given by the top managers are analyzed in accordance with the research plan and theoretical framework (views and opinions). The following insurance companies (respondents) in Croatia are named in alphabetical order:

Allianz Zagreb d.d. (Zagreb); Basler Insurance Zagreb d.d. (Osijek); Croatia Insurance d.d. (Osijek); Euroherc Insurance d.d. (Zagreb); Generali Insurance d.d. (Zagreb); Grawe Croatia d.d. (Zagreb);

Jadransko Insurance d.d. (Osijek); Merkur Insurance d.d. (Zagreb); UNIQA Insurance d.d. (Zagreb) and Wiener Insurance Vienna Insurance Group d.d. (Zagreb).

In order to conduct the survey (also, having in mind the relevance of the data collected), previously mentioned central locations were selected for the following homogeneous groups:

- Insurance companies' top management
- Similar offer related to existing insurance products
- Similar previous manager's knowledge
- More than three years of work experience as a manager.

#### 5.4 Concise analysis of the results

Regarding the prevailing gender, the survey conducted shows that 70% of the respondents are men, while women represent 30%. It is shown that the male gender remains dominant in the insurance companies in Croatia, but nevertheless, the proportion of women in the observed sample is also significant.

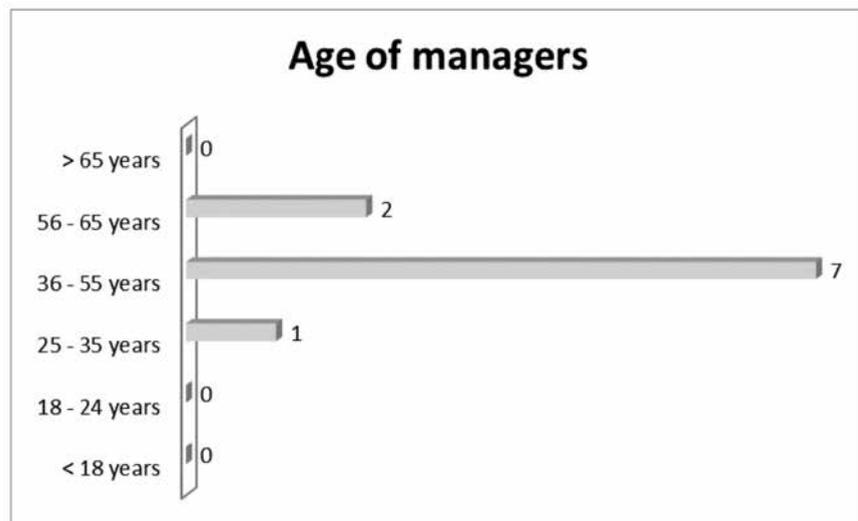
The years of experience - time spent in other positions in the organization, are also considered to be an important factor in this context.

Regarding previously mentioned data, it can be concluded that the experience in top positions in the organization is crucial for understanding the processes within the organization, as well as for the decision-making processes in order to improve existing products or create new insurance products, with respect to competition.

According to the conducted survey, it is significant that all the respondents have three or more years of work experience in top positions in their insurance companies, and therefore, it can be concluded that, in addition to a formal education, a key element of a successful insurance company is based on the accumulated experience of both the managers and other employees.

According to one of the demographic characteristics of the respondents, it can also be concluded that the majority of respondents speak at least one foreign language (8 respondents), while a few speak two foreign languages.

Graph 2 Age of managers



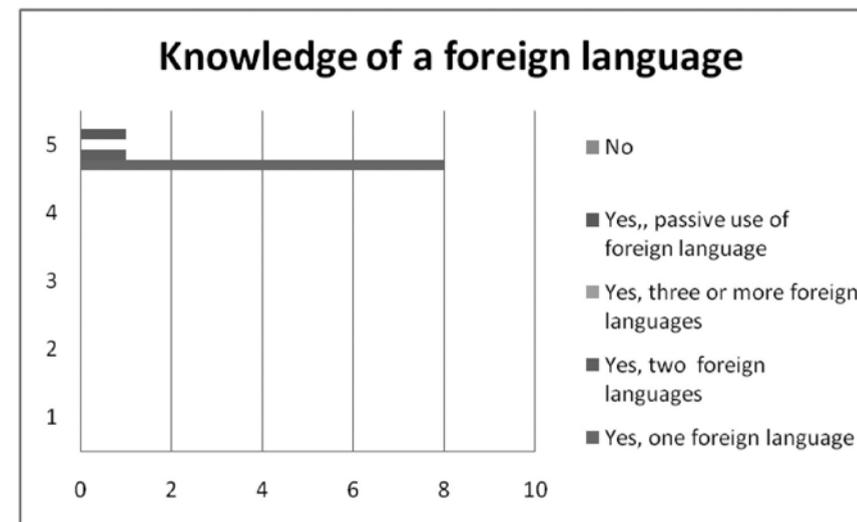
Source: Made by the authors of the article

Graph 3 Working experience of the respondents



Source: Made by the authors of the article

Graph 4 Knowledge of a foreign language



Source: Made by the authors of the article

The causal relationship of the respondents' following characteristics may be a result of their formal education, but also the various forms of non-formal or informal education, and of course, their work experience. Regarding previously mentioned data, the respondents stated statistically significant information related to their formal education.

Speaking of management in the insurance companies in Croatia, it can be concluded (based on the representative, analyzed sample) that the Business Graduates are the leading profession, then Law Graduates and different branches of engineering. Regarding the latter, it is important to emphasize that non-economic professions gain business knowledge via informal forms of education or obtaining a specialist degree in Business or related areas.

Table 2 Formal education completed

1	Undergraduate Bachelor of Engineering	Faculty of Electrical Engineering, J. J. Strossmayer University of Osijek
2	Graduate Engineer	Faculty of Traffic and Transport Science, University of Zagreb
3	Teacher Education Graduate	Faculty of Teacher Education, J. J. Strossmayer University of Osijek
4	Law Graduate	Faculty of Law, University of Sarajevo, Federation of Bosnia and Herzegovina
5	Law Graduate / Specialist Degree in Business	Faculty of Law, Faculty of Economics, J. J. Strossmayer University of Osijek
6	Undergraduate Bachelor's in Traffic Engineering	Faculty of Traffic and Transport Science, University of Zagreb
7	Business Graduate	Faculty of Economics, J. J. Strossmayer University of Osijek
8	Law Graduate	Faculty of Law, University of Zagreb
9	Master of Science in Business	Faculty of Economics, J. J. Strossmayer University of Osijek
10	Master of Science in Business	Faculty of Economics and Business, University of Zagreb

Source: Made by the authors of the article

The entrepreneur society cares for human resources and motivation, specialization and promotion. All of that forms an important part of the establishment and development of the integrated quality of the insurance company and other organizations. The most productive insurance companies have emerged as a result of a simple premise - employees are actively involved in the direct and indirect activities of the company due to their sense of belonging and also, mutual trust.

Business enterprises, including insurance companies have two types of strategies that need to be closely linked and mutually congruent:

1. External - competition in the market (way of competing),
2. Internal - developing, engaging, guiding, motivating and controlling internal resources. The reward strategy should be integrated with the business strategy and formulated in a way to facilitate the achievement of long-term goals of both business and human resources policy.

([http://www.poslovniforum.hr/management/upravljanje\\_ljudskim\\_potencijalima.asp](http://www.poslovniforum.hr/management/upravljanje_ljudskim_potencijalima.asp) Accessed on: October 22, 2014)

Apropos of the above comments and the conducted survey, it can be concluded that the observed insurance companies also take care of their human resources.

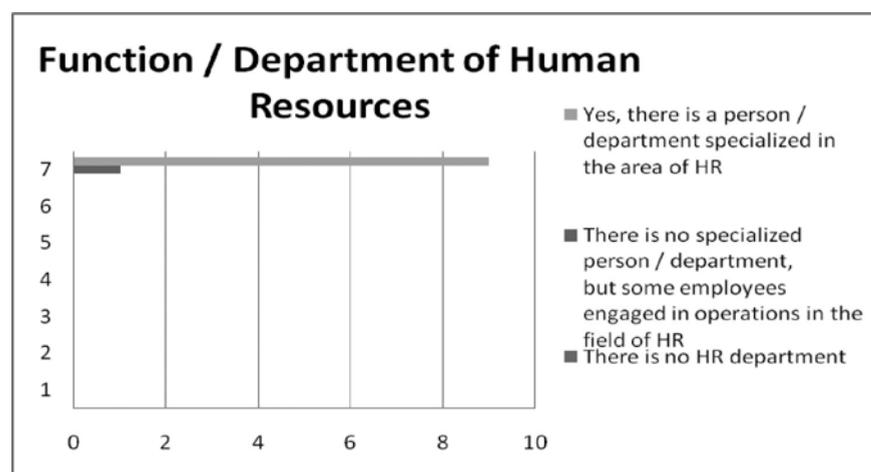
The results show that in 90% of the surveyed insurance companies there is a position / human resources department, while in 10% of the them there is no department / someone who specializes for that position, but nevertheless, certain employees are engaged in the field of human resources management and related operations.

## 6. Conclusion

The managers' abilities and skills (especially recognizing the importance of human resources of its own organization, continuous care and keeping the employees motivated) in the insurance companies differentiate them from the rest of the competition in terms of a better market position and the total amount of annual income.

The conducted survey has shown that the manager's formal education is very important when considering the overall situation within the organization, but of course, taking into account the years of work experience, language skills and other previously mentioned factors. Finally, even if there is no human resources department within the insurance company, a manager should establish one or appoint somebody else to be responsible for it. The same thing applies when it comes to employee's motivation and their further formal and informal education.

Graph 5 Position / Human resources department



Source: Made by the authors of the article

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Jerko Glavaš  
Luka Stanić  
Damir Šebo

## UTJECAJ RAZINE OBRAZOVANOSTI MENADŽERA NA RAZVOJ ORGANIZACIJE TEMELJENE NA ZNANJU: SLUČAJ OSIGURAVAJUĆIH DRUŠTAVA U REPUBLICI HRVATSKOJ

### SAŽETAK

Ključni cilj znanstveno-istraživačkoga rada je identificirati ključne faktore gospodarstva znanja koji imaju izravan utjecaj na postizanje ekonomskoga rasta nacionalne ekonomije u okvirima Europske unije. Analizirajući imenovane varijable kroz provođenje primarnoga istraživanja u sektoru osiguranja (osiguravajućih društava) kreirat će se model konkurentnosti u uvjetima gospodarstva znanja temeljen na navedenom istraživanju i dokazanim hipotezama u provedenom istraživanju.

Kroz analizu dobivenih rezultata potrebno je utvrditi najvažnije grupe varijabli koje utječu na gospodarski rast i konkurentsku prednost. Postavka istraživanja temelji se na tri ključne varijable: obrazovanju, znanju i ljudskim potencijalima.

Analizom rezultata istraživanja utvrdit će se statistički značajni elementi povezanosti između prethodno spomenutih varijabli te će se analizirati međusobni utjecaj varijabli na konkurentsku prednost promatranih osiguravajućih društava.

**Ključne riječi:** menadžment, obrazovanje, znanje, osiguranje, Republika Hrvatska

Melita Balas Rant  
University of Ljubljana  
Faculty of Economics  
Kardeljeva ploščad 17,  
1000 Ljubljana, Slovenia  
melita.balas.rant@ef.uni-lj.si  
Phone: +38641779088

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## COMPETING VIA CREATION OF DISTINCTIVE ORGANIZATIONAL COMPETENCES: "HOW TO DO IT"

### ABSTRACT

The purpose of this paper is twofold: (1) to identify specific and generic organizational competences that comprise three different types of competitive advantages – product leadership, customer intimacy and operational excellence – and (2) to identify processes and approaches by which identified organizational competences are developed. Using the multi-case study approach, the main findings come into two tentative theory building conclusions. (1) Behind different ways of competing there are only four distinct organizational competences – innovation competence, competence of managing business risks, operational competence and stakeholder influence competence. These four competences form three distinct ways of competing: competing via product leadership, competing via customer intimacy and competing via operational excellence. (2) All four organizational competences are composed of nine organizational processes and approaches: bonding, attracting, showcasing, specialization, capitalization, internationalization, specialization, quality control, cost monitoring, and shielding. However, due to the case study research design, this paper provides limited generalizability and thus calls for validations via quantitative research approaches.

**Keywords:** Competitive advantage, value proposition, organizational competences, competence creation processes.

### 1. Introduction

Competitive advantage is defined as the wedge between the value a company creates for the customer and the relative costs of producing this value; for a competitive advantage to exist these gaps should be greater than those of competitors (Brandenburger, Stuart, 1996). Every product/service creates a specific value for customers (Anderson, Narus, Van

Rossum, 2006). The conceptual basis of customer value is referred as value proposition (Barnes, Blake, Pinder, 2009), distinct ways of competing (Porter, 1985), or value discipline (Treacy, Wiersema, 1993). Distinct ways of competing are broadly categorized into three generic types: product leadership, customer intimacy and operational excellence. These value propositions are mutually exclusive and should be carried out by different business organizations (Hagel, Singer, 1999).

Each value proposition has distinctive organizational competences behind it. In theory, distinctive organizational competence behind product leadership is the capacity to conceive attractive new products and services and commercialize them (Hagel, Singer, 1999). Distinctive organizational competence behind customer intimacy is the capacity to identify, find, acquire and build relationships with customers. Distinctive organizational competence behind operational excellence is the capacity to build and manage facilities for high volume, repetitive operational tasks.

These core organizational competences behind different types of competitive advantages provide little how-to advice to managers. There is a need for a more fine-grained view of different organizational competences that fuel competitive advantage in product leadership, customer intimacy and operational excellence. "What specific and generic organizational competences compose different types of competitive advantages and how these organizational competences are developed" is the focus of this research. Development of distinctive organizational competences is closely related to organizational learning, more specifically to knowledge creation (Argote, Ophir, 2002). Knowledge creation is about developing specific skills, expertise, processes, relationship, and outputs that (1) results in superior performance and (2) competitors are unlikely to acquire or copy in a cost or time-effective way (Miller, 2003). Knowledge creation is about development of VRIO resources that fuel the competitive advantage of the firm (Barney, 1997). Organizational capabilities or competences build and manipulate existing VRIO resources of the firm (Eisenhardt, Martin, 2000).

Though the essence of competitive success are organizational competences (Prahalad, Hamel, 1990), existing literature provides little guidance how to create distinctive organizational competences that will result in a competitive advantage in product leadership, customer intimacy or operational excellence.

This paper aims to help fill this gap by studying how organizations detect, create and leverage distinctive organizational competences - skills, knowledge, processes, relationship, proper ties, or outputs an organization possesses - to sustain a competitive advantage in product leadership, customer intimacy or operational excellence.

To do so, we used a longitudinal case-study design. We used the concept of organizational learning as a frame of reference and applied it to three different business organizations - Pipistrel with a competitive advantage in product leadership, BiaSeparation with a competitive advantage in customer intimacy and Optotek in operational excellence - to grasp how business organizations develop valuable skills, knowledge, processes, relationship, proper ties, or outputs and sustain a competitive advantage of product leadership, customer intimacy or operational excellence over time. Thus, our paper has an inductive part and a deductive part (Gavetti, Rivkin, 2007). The inductive part uses detailed observation of the knowledge creation process of three companies, Pipistrel, BiaSeparation and Optotek in order to identify often overlooked constructs that can play a crucial role in the knowledge creation process. The deductive part steps beyond our three focal firms and asks what our findings imply, in theoretical generality, about how the process of knowledge creation/acquisition empowers the competitive advantage of the firm.

The remainder of this paper is organized into four parts. The second section briefly discusses different types of competitive advantage and organizational competences. The third section outlines the research design as suggested by Eisenhardt's (1989) recommendation for building theory from case-study research. It introduces how cases were selected, the research instrument was crafted, and data were gathered and analyzed. Following Eisenhardt's (1989) recommendations, the fourth section aims to come up with relevant hypothesis and unfolds the literature around how organizations detect, create and leverage distinctive organizational competences. The final section comes up with some tentative closures.

## 2. Types of competitive advantage

Different types of competitive advantages build on different economic logics of the business, the nature of competitive battles and cultural imperatives (Hagel, Singer, 1999). To leverage these different economic, competitive and cultural imperatives, specific competences are needed. Roots of competitive advantage are core competences (Pra-

halad, Hamel, 1990). The core competences present distinct clusters of knowledge that differentiate a company strategically from competitors. Distinct knowledge is hidden and embedded in technical systems, skills of employees, and managerial systems and deeply rooted in values (Leonard Barton, 1992). These distinct technical systems, skills of employees, and managerial systems and value competitors cannot easily be copied by competitors; therefore they are asymmetric across companies - also referred to as organizational asymmetries - and thus compose the essence of the competitive advantage (Miller, 2003).

From an economic, competitive and cultural perspective, there are three different types of businesses (Treacy, Wiersema, 1993): product leadership, customer intimacy, and operational excellence. Customer intimacy and operational excellence are different types of core competences behind product leadership. The core competence behind product leadership is product innovation defined as the capacity to conceive attractive new products and services and commercialize them (Hagel, Singer, 1999). The core competence behind customer intimacy is customer relationship management defined as the capacity to identify, find, acquire and build relationships with customers. The core organizational competence behind operational excellence is infrastructure management defined as the capacity to build and manage facilities for high volume, repetitive operational tasks.

These core organizational competences behind different types of competitive advantages provide little how-to advice to managers. A more fine-grained view of different organizational competences that fuel competitive advantage in product leadership, customer intimacy and operational excellence is needed. "What specific and generic organizational competences compose different types of competitive advantages and how these organizational competences are developed" is the focus of the research here.

## 3. Research methodology

We used a longitudinal case-study design (Eisenhardt, 1989; Yin, 1996) and took a grounded approach (Glaser, Strauss, 1967). The grounded theory approach requires researchers to ignore the litera-

ture of theory and fact on the area under study. Because it is difficult to enter the field without preconceptions of organizational competences in mind, we followed Gavetti and Rivkin's (2007) approach and tried to distinguish the notions of organizational competences with which we entered the field from concepts that we truly induced. To minimize the likelihood of replacement of actual findings with the preconception of organizational competences, the research design triangulated multiple data-collection methods, employed quantitative multi-case-study analysis, multiple investigators and multiple interpreters of data. Research methodology design and headings followed Eisenhardt's (1989) recommendations for building theory from case-study research.

### 3.1 Getting Started

We started the research with a research question regarding what specific and generic organizational competences compose competitive advantages of product leadership, customer intimacy or operational excellence, how these organizational competences are developed and what distinctive learning processes lie behind each competence development. We began the data gathering process with preconceptions that organizational competences are a distinct composition of skills, knowledge, processes, relationship, proper ties, or outputs that fuel different types of competitive advantages. We recorded these preconceptions in a document that is available from the author. We identified constructs at this stage and did not articulate a hypotheses, in order to maintain theoretical flexibility.

### 3.2 Selecting Cases

First, we needed to find companies with a distinct competitive advantage in three value disciplines - product leadership, customer intimacy and operational excellence. We approached that task by examining the business magazines, professional magazines, the Internet, business and professional circles - Atech, Akrapovič, BiaSeparation, Bisol, Eurolabel, Hidria, Genelitik, GenePlanet, Instrumentation Technologies, Metrel, Optotek, Pipistrel,

Seaway Group, Studio Moderna, and Tajfun – that proclaimed a competitive advantage in specific market niche internationally (Table 1 in Appendix).

In the second step, six senior management consultants close to these companies ranked these companies by three criteria: (1) ranking by the most distinctive competitive advantage in product leadership; (2) ranking by the most distinctive competitive advantage in customer intimacy and (3) ranking by the most distinctive competitive advantage in operational excellence. Three companies ranked at the top were depicted for further in-depth study: Pipistrel was identified as the company with the most distinctive competitive advantage in product leadership; BiaSeparation was identified as the company with the most distinctive competitive advantage in customer intimacy and Optotek was identified as the company with the most distinctive competitive advantage in operational excellence.

### 3.3 Crafting Instrument

In the third step we conducted in-depth interviews with the CEOs and other long-tenured senior leaders in the companies. We held several sessions of three-hour-long interviews on average. We started the interview with the open-ended question "in what skills, knowledge, processes, relationship, proper ties, or outputs is your company substantially better than the competitors and how these skills, knowledge, processes, relationship, proper ties, or outputs have been developed and sustained over time". We listened carefully to what was reported and asked for more detailed explanations when the interviewee came across ill-justified competences. We also challenged interviewees when we came across contradictory views and explanations.

All interviews were transcribed and written in case study manner of 12 000 words in-length on average. As suggested by Eisenhardt (1989) we circulated case study write-ups to the interviewees, who could then edit them further. We also used data from internal company sources and complemented them with data found in secondary sources found at ajpes.com and gvin.com portal, company press releases, and other reports written by analysts and journalists.

Interviews were conducted mainly in 2010-2011, while the time period analyzed in detail stretched from 2000 to 2010.

### 3.4 Analyzing Data

We did the bulk of our analysis after we conducted most of the interviews. After all of the case studies were approved, we read line by line to identify codeable concepts – words, sentences or phrases with possible significance. This process resulted in the capture over 130 fragments of text, each of which was tentatively labeled, then sorted into preliminary categories with similarly labeled text (Table 2 in Appendix show example of text decoding; full document of text decoding is available from the author). Next we examined these categories looking for relationships between them, in some case merging and/or relabeling the categories and documenting ideas and themes emerging from them. Through this rigorous process we played with meanings emerging from them and looking for new emergent themes, and then we compared the data across the three cases – finally we narrowed all subthemes into three core questions for each of the three businesses (Glaser, Strauss, 1967): (1) what is the core problem of the business (there's usually potential for the biggest profits); (2) what competences are required for effective unraveling of the business problem; and (3) how are identified competences developed. The process of decoding was performed by two people, both experienced in dealing with the interpretation process of qualitative research.

Table 1 summarizes core findings to the three questions (1) the nature of the core problem of the business (there's usually potential for the biggest profits); (2) the types of organizational competences required for effective unraveling of the business problem; and (3) the processes by which identified organizational competences developed for three distinct ways of competing - product leadership, customer intimacy and operational excellence.

Table 1 Summary of core findings

	What is the core problem of the business?	What competences are required for an effective solution of the core business problem?	How are identified competences developed?
Product leadership	The core problem is how to sell the product design to a regulatory agency and customers and turn it into dominant design. This grand problem is disguised into two sub problems: how to win the regulatory bodies on your side; and how to change customer preferences. Put differently, the core problem is to create value for potential customers and other stakeholders, and make them see and grasp the value created.	Competence about design of new categories of planes (operational competence).	Investments into own research institute, cooperation with universities, participation at the professional events, headhunting for the best experts, loyalty of employees; operates like cooperative not profit –seeking firm, selective patenting.
		Competence to shape customer preferences towards the use of a new category and to influence the regulatory bodies to approve its use and second (stakeholder influence competence).	Investments into an external sales and distribution system that functions like a cooperative, participation at different quality reward competitions like NASA, European Business Award etc.; total facility and product system designed in a fuel efficient manner (long before eco building became popular); cooperation with NASA and other global reference institutions (the European Quality Award).
		Competence how to manage multiple-categories of planes over many markets to diversify (minimize) business risk (competence of managing business risks).	Outsourcing production, sales and distribution activities; and focusing only on research, competing and teaching.
Customer intimacy	The problem is how to enter the established relationship between incumbents and appropriate small portion of the value created for yourself. The problem of entering the established relationships between incumbents which appropriate the greatest part of value-created industry pie is disguised in the problem of effective risk management for the customer and the company; and the company capacity to survive in the long-term without potential for short-term gains.	Effective neutralization of business risks for the customer and the company (competence of managing business risks).	Financing the business with long-term profit seeking investors (business angels, and venture capital funds), patenting and investment into a highly-networked, highly expert, highly internationalized sales force; workforce loyalty.
		Competence to influence investors and manage their preferences, expectations (stakeholder influence competence).	Get long-term financial funds, investors... Moving headquarters close to investors; investments into personalization of relationships with customers is developed by participation at professional events, organization of own professional events, headhunting a sales force that have good and trustful relationships with customers.
		Competence to innovate economies of scale for yourself (operational competence).	Clear justification of cost savings for customer. Own cost efficient production methods; economies of scale.
Operational excellence	The main business problem is how to create product niches with above average growth potential (innovate new product categories) and sell it to all incumbents so that economies of scale are created for the company and economies of scope are created for the incumbents.	Competence to create the business niche with high-growth potential / innovate new product categories (innovation competence).	Investments into an active member of different platform where different members from different fields contribute their ideas how the field of photonics may look in the future.
		Competence to work with competitors and create economies of scope for the incumbent firms (so that their sales product portfolio is complete) (stakeholder influence competence).	Investments into B2B relationships with incumbents; trust is legitimized by incorporation of Canon – big MNC that does not compete with Optotek customers directly.
		Competence to innovate economies of scale for yourself (operational competence).	Incorporating Japanese quality control and cost control business standards.

Source: Author

#### 4. Shaping Hypotheses

The fundamental business axiom is that the money lies where the biggest business problems are (Christensen, 2003). Put differently, the tougher the business problem, the greater the profit creation opportunities. However, the greatest profit creation opportunities are difficult to see and implement because top decision makers wrestle with cognitive, structural and institutional inertia (Gavetti, 2011). The theory of competitive advantage provides some tentative propositions where to search for biggest money-making opportunities (Brandenburger, Stuart, 1996), namely to look for solutions that allow (1) effectively creating value for the customer in a completely novel way; (2) efficient capturing part of the customer value (a market pie) for yourself; or (3) effective creation and capturing value from incumbents firms.

The research has shown that the core business problem of Pipistrel, which holds the competitive advantage in product leadership, is how to create value for the customer completely anew. In the case of Pipistrel, creating value for the customer in a completely novel way mainly deals with how to innovate new product categories of UL planes; and how to make prospective customers and aviation regulators – regulators can be viewed as institutional customers – value these novel categories of UL planes. Put differently, the core business challenge of competing with product leadership is how to create value for the customer completely anew, which can be further divided into: (1) how to create and embody the value in a product; and (2) how to make others appreciate the value embodied in the product (change their structure of preferences).

Proposition 1A. Competing with product leadership is effective when the core business problems are related to: (1) how to create and embody the value in a product; and (2) how to make others appreciate the value embodied in the product (impact their preference structure).

The research has shown that the core business problem of BiaSeparation, which holds the competitive advantage in customer intimacy, is efficient capturing part of the customer value (a market pie) for itself. In the case of BiaSeparation, efficiently capturing part of the customer value (a market pie) for yourself mainly deals with how to reduce drug production cost for all kinds of customers ranging

from big pharma companies to small bio-drug firm start-ups; and how to manage business risks of long-term financing of the BiaSeparation business model. Universally speaking, the core business challenge of competing with customer intimacy is how to efficiently capture part of the customer value (a market pie) for oneself, which can be further decomposed into: (1) how to create and embody the value in a product that saves cost for customers; and (2) how to manage business risks that originate from shortage of long-term financiers.

Proposition 1B. Competing with customer intimacy is effective when the core business problems are related to: (1) how to create and embody the value in a product that saves cost for customers; and (2) how to manage business risks that originate from shortage of long-term financiers.

The research has shown that the core business problem of Optotek, which holds the competitive advantage in operational excellence, is the effective creation and capturing value from incumbent firms. In the case of Optotek, the effective creation and capturing value from incumbent firms mainly deals with how to innovate a new product category of medical lasers attractive for big global producers of medical lasers and how to produce this novel product category in a cost-efficient manner. To generalize, the core business challenge of competing with operational excellence are: (1) how to enter incumbents by innovating in a complementary product that create economies of scale for incumbent firms; and (2) how to reduce the production cost for oneself in such a way to maximize economies of scale.

Proposition 1C. Competing with product leadership is effective when the core business problems are related to: (1) how to enter incumbents by innovating in a complementary product that create economies of scale for incumbent firms; and (2) how to reduce the production cost for oneself in such a way to maximize economies of scale.

Different types of competitive advantages evolve around different features of the core business problem (Hamel and Heene, 1994, Dosi et al., 1998). The features of the core business problem define organizational competences required for the effective resolution of the different features of the business problem (Gavetti et al., 2007, King et al., 2001, Dosi et al., 2000). Our research has revealed two types

of organizational competences that are required for the effective resolution of different features of the business problem: (1) generic organizational competences that do not depend on the nature of the business problem, and (2) specific organizational competences that depend on the nature of the business problem. Generic competence independent of the nature of the business problem is a competence to influence and manage the expectations of most relevant external stakeholders (customers, investors, regulators etc.). This is aligned with the Froeman (1999) proposition that the competence to influence stakeholders is the core VRIO resource of the firm. Specific organizational competences that depend on the nature of the business problem are: competence to innovate, competence to manage business risk and operational competence.

Proposition 2A. Regardless of the type of competing, the required competence for long-term company survival is competence to "influence stakeholders".

Investments into the development of specific organizational competences are valuable only when they are aligned with the nature of the business problem. Research has shown that in addition to competence to influence stakeholders, Pipistrel, which holds a competitive advantage in product leadership, attributes its success to two types of organizational competences: competence to innovate, and competence to manage business risk. Competence to innovate is – the capacity to think creatively, to relentlessly pursue new product variations, to commercialize them quickly (Treacy and Wiersema, 1993) – is needed to address "how to create and embody the value in a product" aspect as a core business problem.

Competence to innovate enormously increases the business risk due to over-exploration of the novel product categories on the account of exploitation of existing product categories (Levinthal and March, 1993). Due to above the average business risk, competence to innovate it has to be complemented with the competence to manage (minimize) business risks. More specifically, capacity to manage the financial aspect of the business risk is according to the Federation of European Risk Management Association on the increase (Sadgrove, 2005).

Proposition 2B. Establishing the competitive advantage in product leadership requires two competences: innovation competence and competence to manage business risks.

In addition to competence to influence stakeholders, BiaSeparation, which holds a competitive advantage in customer intimacy, attributes its business success to operational competence and to competence to innovate. Operational competence is important for effective tailoring of BiaSeparation's generic products (CIM monolithic columns needed for purification of drug concentrates) to adapt specific drug production processes for a diverse group of customers, ranging from big multinational pharma companies to small bio-drug start-ups. Their drug production processes are unique, and present the source of the competitive advantage for BiaSeparation's customers. Their drug production processes are in most cases wholly protected by patents at the national drug agencies like the FDA in the USA or the EMA in the EU. BiaSeparation holds state-of-the-art operational competence in a very narrow product line. Being the only one in the world in this specific product line – the supply of CIM monolithic columns, BiaSeparation's competitive advantage is driven by several drivers: scale, capacity utilization, linkages, vertical integration, location, timing, learning, policy decision and government regulations (Porter, 1985).

Yet operational efficiency in tailoring CIM monolithic columns to individual customer needs is very expensive due to the fact that big revenues are expected to come with substantial time delay. This creates substantial business risks. "One principle such companies understand well is the difference between profit and loss on a single transaction and profit over the lifetime of their relationships with a single customer" (Treacy and Wiersema, 1993). Operational competence has to be coupled with competence to manage business risk. More specifically, the capacity to manage the commercial aspect of business risk, which presents the highest share of all types of risks according to FERMA (Sadgrove, 2005).

Proposition 2C. Establishing the competitive advantage in customer intimacy requires two competences: operational competence and competence of managing business risks.

Research has shown that Optotek attributes its success to the competence to innovate, operational competence and competence to influence stakeholders. Optotek seeks ways to minimize overhead costs, to reduce transaction costs, eliminate unnecessary intermediate production costs, and optimize business processes across functional and organi-

zational boundaries. However, being operationally efficient – performing similar activities better than the competitors - is not sufficient for a sustainable competitive advantage (Porter, 1996). Optotek sustains its competitive advantage in operational efficiency or excellence by innovating new product categories that complement the portfolio of big incumbents and create economies of scope for them.

Proposition 2D. Establishing the competitive advantage in operational excellence requires two competences: innovation competence and operational competence.

Figure 1 graphically summarizes the interaction between distinctive ways of competing (product leadership, customer intimacy, and operational excellence) and different types of organizational competences.

Figure 1 Types of competitive advantage and competences



Source: Author

Analysis of Pipistrel and Optotek, which both exhibit competence to innovate, showed that companies use multiple approaches to develop this competence. First, both companies work in close cooperation with universities, have active member-

ship in different professional platforms, compete in international professional events etc. This approach to development of innovation competence we labeled bonding. Secondly, both companies are headhunting the world's best technical experts globally; also both companies invest a lot into personal relationships and profit sharing schemes with employees, which results in a high level of employee loyalty. This approach we labeled attracting. The third group of activities which result in the development of innovation competence include selective patenting; competing in international professional events, participating at conferences, professional events, and organizing own professional events. This approach we labeled showcasing.

Proposition 3A. Innovation competence is developed through bonding, attracting and showcasing.

Analysis of Pipistrel and BiaSeparation, both of whom exhibit competence to manage business risk, is developed also by different processes. First, both companies focus only on a few core activities (research), outsource the rest of value adding activities (production, sales and distribution activities) and educate their stakeholders (customers, producers, distributors etc.) how to conduct these outsourced activities. This results in the reduction of the business-risk. We labeled this approach specialization. Secondly, both companies finance its investments exclusively by equity capital instead of debt capital, which also reduces the risk of insolvency. We labeled this approach capitalization. Last but not least, both companies – though being small – sell their products globally, with a highly internationalized sales force; highly internationalized management board. Internationalization reduces diversified business risk on multiple-territories.

Proposition 3B. Competence over managing (minimizing) business risk is developing through specialization, capitalization and internationalization.

As Porter (1996) proposed, operational competence is established by "any number of practices that allow a company to better utilize its inputs ...Some companies are able to get more out of their inputs than others because they eliminate useless efforts, employ more advance technology, motivate employees better, or have greater insight into managing particular activities...". Analysis of Optotek and partly also BiaSeparation, which both exhibit operational

competence, showed that this competence is the result of unique cost efficient production methods, focus on narrow product lines sold globally that fuel economies of scale, efficient quality control system (that eliminates bad products, and minimizes waste of time and material) and clear cost control business standards. We labeled these approaches specialization, quality control and cost monitoring.

Proposition 3C. Operational competence is developed through specialization, quality control and cost monitoring.

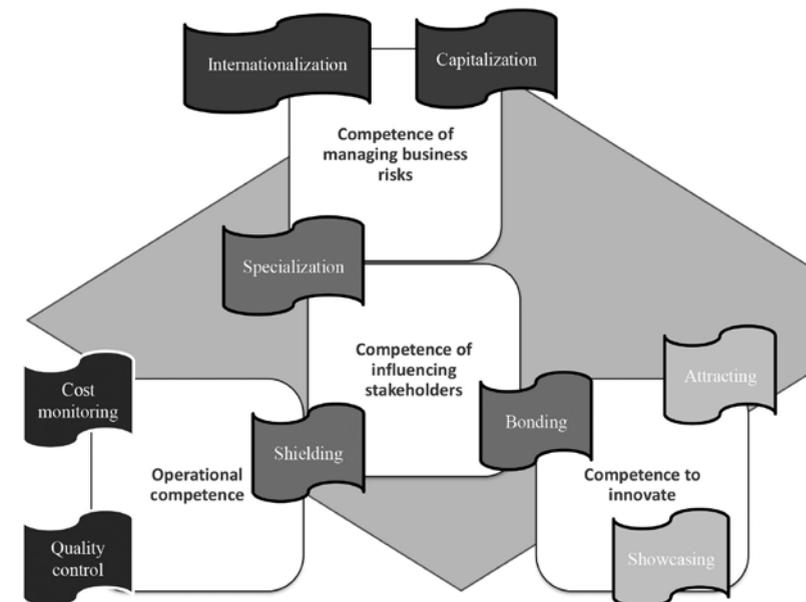
All three companies possess competence to influence stakeholders. This competence is developed by three different approaches. The first approach is bonding that is enforced through participation at different quality award competitions like the NASA, the European Business Award; cooperation with the NASA and other global reference institutions; moving the headquarters close to the investors-owners, investments into B2B relationships with incumbents and personalization of relationships with customers etc.

The second approach is labeled specialization in narrow, state-of-art competence base. All three companies cover a very narrow product line, offer it internationally, invest into an external sales and distribution system or develop an internal one by headhunting a sales force that have good and trustful relationships with customers. The third approach we labeled shielding. For instance Canon – owner of Optotek - provides a shield for Optotek's business initiatives and presents an important source of legitimization of Optotek's business practice.

Proposition 3D. Competence of influencing stakeholders is developed via bonding, specialization and shielding.

Figure 2 graphically presents processes and approaches by which different organizational competences are developed. Specialization and bonding are two most effective approaches to the development of organizational competences. Specialization is a crucial building block of three organizational competences: competence to influence stakeholders, operational competence and competence to manage risks. The process of bonding is the building block of two competences: the competence to influence stakeholders and the competence to innovate.

Figure 2 Processes behind the development of organizational competences



Source: Author

## 5. Concluding Remarks

The processes by which core organizational competences that lie behind different types of competitive advantages remain a sort of puzzle. This paper aimed to look behind the veil and uncover some of the dominant processes that result in the creation of distinctive organizational competences and sustainable competitive advantages.

The analysis we conducted here identifies nine processes that result in four distinct organizational competences: bonding, attracting, showcasing, specialization, capitalization, internationalization, specialization, quality control, cost monitoring, and shielding. The processes of bonding, attracting and showcasing create the organizational competence to innovate. Processes of specialization, capitalization, and internationalization create organizational competence to manage (minimize) risk. The processes of specialization, quality control, and cost monitoring build up the organizational competence of operational efficiency. And finally, the processes of bonding, specialization and shielding result in organizational competence to influence stakeholders.

Furthermore, our research revealed that different organizational competences result in different types of competitive advantage. Competence to influence stakeholders, competence to innovate and competence to manage risk result in a competitive advantage in product leadership. Competence to influence stakeholders, competence to manage risk and operational competence result in a competitive advantage in customer intimacy. Competence to influence stakeholders, competence to innovate and operational competence result in a competitive advantage in operational excellence.

Though product leadership, customer intimacy and operational excellence are three distinct, mutually exclusive ways of competing, our research revealed (1) that they are all built out of four organizational competences and (2) that these four organizational competences are developed by similar knowledge creation processes. The distinctive way of competing does not come from different organizational competences or different competence creation processes, but from different ways of combining these competences into cohesive architectures (Baldwin, Clark, 2000). Each type of organizational competence thus presents a unique module, and competitive advantage originates from unique compositions of different modules (organizational competences) together in cohesive wholes.

However, due to the case study approach, the paper provides limited generalizability of conclusions to mainly technologically intensive, small and medium sized companies that are run by entrepreneurial founders. To overcome the research limitation of limited reliability, the author suggests the application of a similar qualitative research approach to labor intensive, large companies with dispersed ownership and management structure. To overcome the research limitation of limited research validity, the author also suggests the application of a large-scale quantitative research approach on a similar set of companies, namely technologically intensive, small and medium sized companies that are run by entrepreneurial founders.

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#### (ENDNOTES)

- 1 Average effective workers, calculated on the actual working hours performed in the years.

#### Appendix:

Table 1 List of companies with a competitive advantage in a specific market niche internationally

Name	Competitive advantage	Revenues 2010 (in M €)	Revenues 2000 (in M €)	Average employees 20101
Atech	First in the Alpe Adria region in the production and supply of electro-motors and navigation control systems for heaters on biomass	5,5	1,4	69
Akrapovič	First in the world in titanium exhaust systems for racing bikes	31,6	7,8	415
BiaSeparation	First in the world (the only one) in CIM monolithic columns - the most cost efficiency technology used in the purification stage of bio-drug production process	3,1	0,3	41
Bisol	First in the world (the only one) in top quality photovoltaic modules (the highest electricity extraction ratio and the lowest outwear of photovoltaic modules)	60,4	0	125
Eurolabel	Third in the world in the software service of design and printing of labels with bar codes and RFID labels	3,2	0,55	38
Hidria	Third in the world in diesel cold start systems for internal combustion engines. Proactive design manufacturer for OEM and tier 1 suppliers. First in the world in range extenders for hybrid electric vehicles. Proactive design manufacturer for OEM. Second in Europe in Alu die castings for automotive steering systems. Proactive design manufacturer for tier 1 and tier 2 suppliers.	187	77	2611
Genelitik	Number one in Slovenia in providing the product of "advice on optimal nutritional and lifestyle choices based on genetic analysis"; geographically in the process of refocusing on the EU market and Wellness centers	0,13	0	2
GenePlanet	Number one in Slovenia in providing the product of "advice for prevention of potential (curable) diseases based on genetic analysis"; geographically in the process of expanding to the CEE region and B2C market	0,42		3
Instrumentation Technologies	First in the world in the production, supply and advice in instrumentation for beam particles, that is instrumentation for measuring the positions of elementary particles in accelerators	5,4	0,18	51
Metrel	First in Europe in the production and supply of test and measurement instruments for electrical safety of installations in the low voltage electrical distribution industry	12,1	10,3	168
Optotek	First in the world in OEM sales of ophthalmological lasers for diagnostics and therapy. Used to be proactive designer. Transitioning from OEM to own branding strategy. In year 2011 60% of revenue expected from own brand.	4,38	2,1	51
Pipistrel	Number one in the world in the new and recently established categories of ultra light aircraft: first in the world in double seat motor gliders that can turn into pure gliders once in the air; first in the world in two-seat gliders with an auxiliary and in the category of electric two-seater airplanes; first in the world in newly established category of electric two seater gliders (not yet approved for flying in many countries).	7,2	0,67	53
Seaway Group	First in the world in sails and motor boat design for OEM. Proactive designer. Main revenue driver royalties are received throughout product life cycle from designed boats. Transitioning to own brands: Shipman - a line of carbon sailing yachts, Skagen - a range of world-girdling raised pilothouse motor yachts, and Greenline - a line of carbon boats with an electric engine.	34,3	4,58	185
Studio Moderna	First in Central and Eastern Europe in electronic retailing and direct marketing	250	25	4500
Tajfun	First in Europe in the production and supply of three point logging winches	15,1	5,5	137

Source: Balas Rant (2013)

**Table 2 Text decoding and concept identification framework**

Competitive advantage in product leadership. Case: company Pipistrel.		
First order codes (only a few examples):	Sub-themes identified:	Aggregate findings and construct development:
<p>We started to produce ultra-light planes (ULP) more than two decades ago. The company was set up in 1982... At the beginning there were no flight standards for the ULP, later international and national aviation agencies posed severe flight constraints and conditions for ULP...</p> <p>We constantly influence these agencies and their standards for ULP flights ... We shape them... This is our main strategic task. The IATA adjusts standards by our new UL planes.....</p> <p>....</p>	<p>This business is determined by the rules of external regulatory bodies (national aviation agency). External regulatory bodies (international aviation agency) determines the market niches by setting flight standards; when doing so it looks for planes of some referential agents; Pipistrel is such a reference.</p> <p>...</p>	<p>#1: What's the core problem of the business:</p> <ul style="list-style-type: none"> <li>• The core problem of the business is how to sell the product design to a regulatory agency and customers and turn it into a dominant design. This grand problem is disguised into two sub-problems: how to win the regulatory bodies on your side; and how to change customer preferences.</li> </ul>
<p>More than 20 years ago we started dreaming how to fly an ultra-light plane without an engine, how to design an energy neutral plane. Back then fuel consumption for ULP was not important yet today it is getting extremely important. Twenty years ago we were laughed at, now we can laugh. Because of our twenty-year old philosophy of flying planes without an engine, we are way ahead of the competition. Even if they try to copy us today, it is impossible to copy the deep knowledge that we have developed during the years of experimentation and failure over design and production of energy efficient ULPs.</p>	<p>At the beginning the concept of a plane without an engine and the company was perceived as foolish, irrational; the company needed to sustain the period of foolishness. After some time what seemed foolish turned out to be a lead competence. Huge diversity across customers. Total customization of product production.</p> <p>...</p>	<p>#2 –What competences are required for effective unraveling of the business problem:</p> <ul style="list-style-type: none"> <li>• Competence to design new categories of planes;</li> <li>• Competence to shape customer preferences towards the use of a new category;</li> <li>• Competence to influence the regulatory bodies to approve its use and second;</li> <li>• Competence how to manage multiple-categories of planes over many markets to diversify (minimize) business risk.</li> </ul>
<p>The French people want different kinds of planes than the Italians, Saudi Arabs, Brazilians or the Chinese. French men take planes to be their big toys, while Italians want planes to show off to their neighbors with as much light as possible. We design each plane to fit the preferences of a specific customer. Every customer matters.</p> <p>...</p>		
<p>We intentionally do not invest either in marketing, or in sales... We do not want these activities and jobs. They are needed, yet we preserve the scarce resources to invest in research, development and design of new categories of ULP. Very innovative products are being introduced in professional magazines, they have won the professionally quality and innovation awards and this is the best marketing possible through which we also impact the regulatory bodies. We have been following in this direction for over 20 years now.</p>	<p>The advanced design of UL planes (with follow-up publicity in diverse media) serves as replacement for cost-consuming sales and marketing activities.</p> <p>...</p>	<p>#3 –How competences are developed:</p> <ul style="list-style-type: none"> <li>• Competence about design of new categories of planes is developed via investment into an own research institute, cooperation with universities, participation at the professional events, headhunting for the best experts, loyalty of employees; operates like a cooperative not profit – seeking firm, selective patenting.</li> <li>• Competence for shaping customer preferences is developed by investments into an external sales and distribution system that functions like a cooperative, participation at different quality award competitions like the NASA, the European Business Award.; total facility and product system designed in fuel efficient manner (long before eco building became popular).</li> <li>• Competence for influencing the regulatory bodies is developed by cooperation with NASA and other global reference institutions (the European quality rewards).</li> <li>• Competence of managing multiple-categories of ULP over many markets to diversify (minimize) business risk is developed by outsourcing production, sales and distribution activities; and focusing only on research, competing and teaching.</li> </ul>
<p>We developed the first five prototypes, we conduct tests and when they are well passed we decompose the new category of ULP into a set of parts whose production is outsourced to specialized producers. We have tight quality control procedures following the Japanese TQM philosophy. Also outbound business activities like sales and maintenance are outsourced to our distributors.</p>	<p>New product innovation is the core business adding activity – after the development of product specification, production and value chain activities are completely outsourced. Only the first few prototypes are produce by the company.</p> <p>...</p>	
...		

Competitive advantage in customer intimacy. Case: Company BiaSeparations.		
First order codes (only a few examples):	Sub-themes identified:	Aggregate findings and construct development:
<p>We produce support products that make API and drug development processes more efficient... Our customers are bio firms and R&amp;D departments of big pharma. Our products are called</p> <p>We are the only ones in the world that are developing and offering intelligent filters. In professional terms, they are called monolithic chromatographic columns. Monoliths are enabling tools for the purification of biomolecules in nanometer range (virus, plasmid DNA, phages, IgM, PEGylated proteins, etc.) that offer unprecedented possibilities. They stand for elaborate design of high speed, high efficiency, and high yield in downstream processing. We have more than 100 variations of monolithic chromatographic columns.</p>	<p>Provide support to the customer key value adding processes. One product in many variations. ...</p>	<p>#4: What's the core problem of the business:</p> <ul style="list-style-type: none"> <li>• The problem how to enter the established relationship between incumbents and appropriate small portion of the value created for yourself. The problem of entering the established relationships between incumbents which appropriate the greatest part of value-created industry pie is disguised in the problem of effective risk management for the customer and the company; and the company capacity to survive in the long-term without potential for short-term gains.</li> </ul>
<p>We are small and the drug development process takes time and involves uncertainties. Our customers want assurance that we will still be around in 10 years' time when the final drug and drug development process is patented and launched on the market. Despite the fact that our technology reduces drug development and production costs significantly (10x), this is not enough to earn the trust of the customers. We need to develop trust and convince him/her that we are capable of long-term survival. Otherwise we are too risky a choice for a customer despite the considerable costs savings that we provide for them.</p>	<p>Proof of being capable of surviving long-term. Creating substantial cost and quality benefits for the customer is not enough. Proof of being capable of surviving long-term ...</p>	<p>#5 –What competences are required for effective unraveling of the business problem:</p> <ul style="list-style-type: none"> <li>• Competence of effective neutralization of business risks for customers and the company;</li> <li>• Competence of effective personalization of relationships with all stakeholders (customers, investors, also competitors) and to treat them non-rationally like family in order to enhance chances for long-term huge success (rationality).</li> </ul>
...		

When we develop a specific product (intelligent filter) for a client, we have to constantly provide product servicing to the clients. Practically speaking we place our employee into the client's lab to provide continuous support and advice to their API innovation and drug development process.	Company employees are consulting and working jointly on important research projects (value adding activities) with customers. They are acting as clients' employees. Development of a customer network through an active presence at professional events and networks. ...	#6 – How competences are developed • Competence of customer/company business risk management is developed by financing the business with long-term profit seeking investory (business angels, and venture capital funds), patenting and investment into highly-networked, highly expert, highly internationalized sales force; workforce loyalty. • Competence of effective personalization of relationships with investors is developed by moving headquarters close to investors; competence of effective personalization of relationships with customers is developed by participation at professional events, organization of own professional events, headhunting a sales force that have good and trustful relationships with customers.
We constantly attend professional conferences, symposia and other events to come across new trends and new potential clients.	...	
...		

Competitive advantage in operational excellence. Case: company Optotek		
First order codes (only a few examples):	Sub-themes identified:	Aggregate findings and construct development:
The medical laser systems market has been expanding at a steady rate worldwide in the last 25 years. Lasers in general have been on the rise from the 1960s on, when a laser started spreading around many diverse sectors from manufacturing tools, production of machine high-strength steels, manufacturing of photovoltaic cells, semiconductors and miniaturized components for the computer industry to medical sector....	This is a mature type of business that serves multiple industries from tooling to computer industry and medicine. There's wider usage of lasers for medical diagnosis and treatment. ...	#7: What the core problem of the business is: • The main business problem is how to create product niches with above average growth potential (innovate a new product category) and sell it to all incumbents so that economies of scale are created for the company and economies of scope are created for the incumbents. Instead of competing with incumbents – where it is not possible to win – Optotek has selected to cooperate with big incumbents.
Currently, lasers are being extensively employed for diagnosis and treatment of a number of diseases, which hitherto were difficult to treat using traditional medicine.	...	
...		
Optotek grasped the opportunity and in 1999 developed the first Nd:YAG lasers for treatment of secondary cataract and in 2004 also a special laser application for post-surgical treatment of glaucoma. The latter is known more as slit lamps.	Optotek is the first in the world in developing a new type of laser for treatment of secondary cataract (no one had it at the time of its development). Innovate new product categories and offer them to incumbent firms so that their sales product portfolio is complete. ...	#8 –What competences are required for effective unraveling of the business problem: • Competence to detect the business niche with high-growth potential before others (be the first mover) • Competence to innovate new product categories and create economies of scope for incumbent firms (so that their sales product portfolio is complete) • Competence to innovate economies of scale for yourself
Optotek's strategy was to approach established companies that produced and sell different medical lasers from dermatology, ophthalmology and dentistry, but lack slit lamps in their product offer. The strategy proved right. After 2000 all products were sold at first to OEMs.	...	
...		
Optotek is organized into two departments, research and development and production. Collaboration between the two is tight. Production is organized in small-batches at best amounting to 100 product/ batch. Each batch is adjusted to new learning from the R&D department and feedbacks from the OEMs.	Two organizational units – one for innovating new business niches, and another for innovating and implementing cost-efficient production solutions. Top management is member of the EU platform where different members from different fields contribute their ideas on how the field of photonics may look like in the future. ...	#9 – How competences are developed • Competence to detect new business niches with high-growth potential before others (be the first mover) is developed by being an active member of a different platform where different members from different fields contribute their ideas on how the field of photonics may look like in the future. • Competence to innovate new product categories and create economies of scope for incumbent firms (so that their sales product portfolio is complete) is developed by top management personal trust base investments into B2B relationships with incumbents; trust is legitimized by incorporation of Canon – big MNC that does not compete with Optotek customers directly. • Competence to innovate economies of scale for yourself is developed by incorporating Japanese quality control and cost control business standards.
I am (CEO, Boris Vedlin) a member of Photonics 21, where new trends in laser technologies and new applications are spotted.	...	
...		

Source: Author

Melita Balas Rant

## NATJECANJE STVARANJEM SVOJSTVENIH ORGANIZACIJSKIH SPOSOBNOSTI: „KAKO TO UČINITI“

### SAŽETAK

Svrha ovoga rada je dvojaka: (1) identificirati specifične i generičke organizacijske sposobnosti koje čine tri različite vrste konkurentskih prednosti - vodstvo proizvođa (product leadership), individualiziranu ponudu vrijednosti kupcima (customer intimacy) i operativnu izvrsnost (operational excellence) - i (2) identificirati procese i metode razvoja identificiranih organizacijskih sposobnosti. Metodom studije slučaja, glavni rezultati ukazuju na dva provizorna zaključaka za izgradnju teorija. (1) Iza različitih načina natjecanja postoje samo četiri različite organizacijske sposobnosti – inovativna sposobnost, sposobnost upravljanja poslovnim rizicima, operativna sposobnost i sposobnost utjecanja na dionike. Ove četiri sposobnosti čine tri različita načina natjecanja: natjecanje vodstvom proizvođa, natjecanje individualiziranom ponudom vrijednosti kupcima i natjecanje operativnom izvrsnosti. (2) Sve četiri organizacijske sposobnosti sastoje se od devet organizacijskih procesa i pristupa: povezivanja, privlačenja, pokazivanja, specijalizacije, kapitalizacije, internacionalizacije, specijalizacije, kontrole kvalitete, praćenja troškova i zaštite. Međutim, zbog dizajna studije slučaja, ograničena je mogućnost generalizacije rezultata rada te je stoga potrebno provjeriti valjanost zaključaka kvantitativnim metodama istraživanja.

**Ključne riječi:** konkurentska prednost, ponuda vrijednost, organizacijske sposobnosti, procesi stvaranja sposobnosti

*Dijana Mečev*  
Polytechnic of Šibenik  
Trg Andrije Hebranga 11,  
21000 Šibenik, Croatia  
dijana@vus.hr  
Phone: +385992714269

*Ivana Kardum Goleš*  
Polytechnic of Šibenik  
Trg Andrije Hebranga 11,  
21000 Šibenik, Croatia  
ikardum000@gmail.com  
Phone: +385989043819

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# PRIMARY HEALTHCARE SERVICE QUALITY MEASUREMENT: SERVQUAL SCALE

## ABSTRACT

The purpose of this study is to examine customers' perceptions of primary healthcare service quality in public institutions in the city of Šibenik. The research was aimed at investigating whether there is a difference between customers' expectations and their satisfaction with received medical services. The findings suggest that primary healthcare public institutions need to improve all the dimensions of SERVQUAL service quality from the carried out gap analysis. Furthermore, the research analyzed whether there is a difference in the perception of the given healthcare service among examinees considering their gender, age, employment status and frequency of using the mentioned services. It was established that demographic variables of age and gender do not generate significant differences in the perception of healthcare service quality while there is significant difference in satisfaction regarding employment status and frequency of services usage. The given results partially differ from the data acquired in other relevant and similar studies. The factor analysis which was conducted did not confirm "a priori" accepted theoretical model of Parasuraman et al. (1988) which claims that the concept of quality has five dimensions. On the contrary, it reached the conclusion that three highly reliable factors were identified regarding the perceived quality of primary healthcare services.

**Keywords:** Primary healthcare sector, SERVQUAL, factor analysis, reliability analysis

## 1. Introduction

Ever since the beginning of the 1990s, the health sector in Croatia has experienced significant reforms, which predominantly comprised the level of primary healthcare protection. The main goal of these reforms was to liberate the system from excessive bureaucracy and to enhance the professional and organizational responsibility of medical work-

ers (Katić et al., 2009) with the purpose of primarily "increasing service quality, providing greater availability of medical care, regulating the number of patients per doctor, improving existing informatization, and introducing a system of control" (Ministry of Finance, 2014).

The most significant change that was introduced by reforms was the transition which established the medical system as the mixture of public and private. The majority of doctors working in primary

healthcare became individual contractors with the Croatian Health Insurance Fund, whereas the rest remained as employees in health centers. With these reforms private doctors became concessionaires of former state medical offices and started to be financed mainly through poll taxes, which depend on the number of patients and their age differentiation. The mentioned reforms in many cases did not contribute to the realization of their objectives since they positioned doctors as financially dependent on the number of enlisted patients. This consequently led to doctors' offices with too many patients (somewhere over 2000) and disabling them in dealing with and resolving medical problems. In the course of their work, doctors see many patients to whom, due to lack of time, they cannot dedicate themselves completely.

A research carried out concerning Croatian doctors established that in city doctors' offices, family doctors perform so many procedures in a single day that, if they devoted the prescribed time, their working day would have to be approximately 8 hours and 48 minutes and in rural offices even 10 hours and 30 minutes (Labor et al., 2012). It is prescribed that a doctors' working day is 7 hours while it is also defined by regulations that a family doctor is obliged to see every patient who comes in his office which consequently reduces the time necessary for individual patients and the efficiency of work.

A more visible problem in the organization of healthcare is an increase in the number of patients over 65 who, in general, use the services of primary medical care more often than younger patients. According to the last Census in 2011, they represent 17.7% of the entire population and in Šibenik this percentage is even higher – 19.2% (Croatian Bureau of Statistics, 2011).

Due to the circumstances and working conditions primary healthcare has become an unattractive profession and Croatia is faced with a deficit of family doctors of several hundred (Bakar, 2009). It is therefore not unexpected that the results of a research conducted in 2007 on a sample of 9000 Croatian citizens, of them 405 from the County of Šibenik-Knin, conclude that the examinees rated healthcare services only 5.2 (on the scale of 1-10). The examinees from the County of Šibenik-Knin rated the service quality even lower regarding the national average – with low 4.8 (Dobrotić et al., 2007: 85). The research that would apply to the quality of primary healthcare services in the city of Šibenik was

not carried out in the mentioned study.

Patients' expectations and pleasure have received more significance in the assessment of healthcare service quality. Creators of medical policy and practice have become more aware of the patients' central role in defining optimal care and in improving the quality of medical care. "Including patients in the improvement of medical healthcare is not only desirable but socially, economically and technically essential. Patients' opinion about doctors' work is created according to different subjective, objective, emotional and rational attitudes and interactions of individuals and communities" (Grol and Wensing, 2000). It is therefore essential to constantly monitor and analyze attitudes, expectations and opinions of health services users in order to establish if they match with, and to what extent, those of healthcare providers (Ozretić Došen et al., 2009: 28).

There is no agreement between scientists on the definition of quality in total healthcare systems, among the population or in the separate healthcare services. Different cultures have different values and priorities; for some the very existence of medical staff and facilities is "good", whereas for some it means equity and empathy, and for developed countries it means optimal clinical outcomes (Tipurić, 2014). Moreover, there is no agreement on methods of measuring the quality of medical services. The greatest reason for that is the fact that medical or healthcare organizations are service companies and thus have their own specific qualities related to products and these are namely the lack of substantial properties, transience and heterogeneity (Trbušić, 2005; Šiško Kuliš and Grubišić, 2010) while some other authors stress the problem of possession (e.g. Pupovac, 1999; Ozretić Došen, 2002; Kotler et al., 2006; Kotler and Keller, 2008). Besides the already mentioned characteristics, the process of measuring medical services is a complex one due to the following reasons: impossibility of controlling and rejecting services that do not correspond to a certain standard before their administering (Ozretić Došen et al., 2010: 32); it is more difficult to distinguish the level of quality in medical than in other services, primarily because they imply human beings and connect their welfare directly to quality; "users always want more and their expectations of quality are different from the quality offered; only practice, careful listening and attention can lead to a more or less truthful idea" (Kolanović, 2007: 214-215).

On the basis of all above, the main problem of this research is measuring service quality of primary healthcare in the city of Šibenik. It is expected that the results of this research will provide useful information to healthcare providers in public institutions of primary healthcare services in the city of Šibenik, in order for them to make valid decisions regarding possible improvement of service quality and, in addition, to scientists and practitioners in solving problems and discovering possibilities in reaching contentment in this sector.

## 2. Conceptual background

There are two key elements in measuring service quality: customers' expectations (Brown and Swartz, 1989) and perceived quality that reflects customers' opinion about the excellence of service (Zeithaml, 1988). In the light of these factors, Parasuraman et al. developed the SERVQUAL model in 1985 which identified ten dimensions for measurement of service quality. With further improvements of this process, the same authors developed a new model of dimensions in 1988 where the previous ten dimensions were reduced to five as follows:

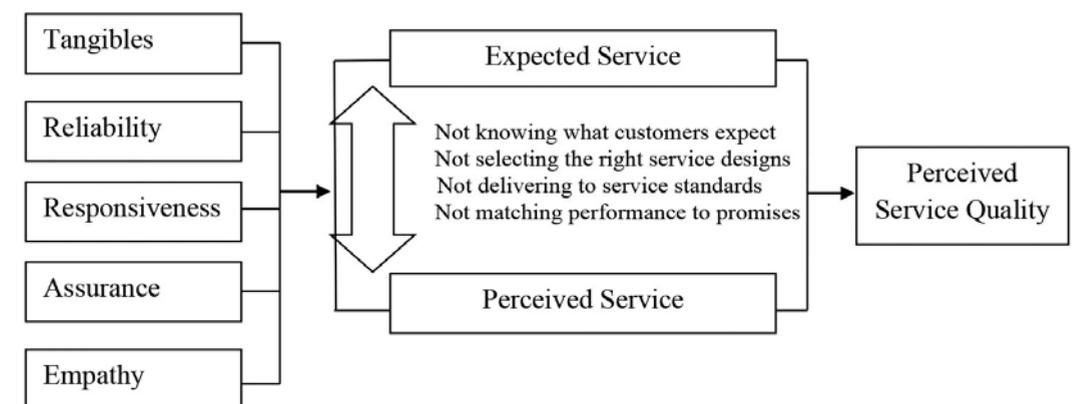
tangibles - physical facilities, equipment, and appearance of employees; reliability - the ability to perform the promised services dependably and accurately; responsiveness - willingness to help customers and provide prompt service; assurance - the knowledge and courtesy of employees, as well as their ability to convey trust and confidence; empathy - the provision of caring and individualized attention to customers.

From the listed dimensions it is perfectly clear that services possess less tangible elements and the research therefore needs to focus more on intangible ones. The mentioned criterions have been established as "relevant for many services" (Johnson, 2002).

The SERVQUAL scale consists of 22 items for assessing customer perceptions and expectations regarding the quality of service. A level of agreement or disagreement with a given item is rated on a seven-point Likert scale. The results are used to identify gaps that are determinants of customers' perception of service quality as shown in Figure 1.

The gap is measured by the difference between perceptions and expectations scores and indicates the level of service quality. If the result is positive, perceived service exceeds expected service. A negative result means low quality of service. According to this instrument, service quality occurs when perceived service meets or exceeds the customer's expectations.

Figure 1 Measuring service quality using the SERVQUAL model



Source: Adjusted according to Parasuraman et al. (1988)

The SERVQUAL model has been subjected to criticism by numerous scientists (e.g. Lewis and Mitchell, 1990: 15; Cronin and Taylor, 1992: 55-56; Teas, 1993: 29). These critical comments have largely been directed towards the theoretical base of the model and its operational mode (measurement principles). The most frequent criticism is related towards validity and reliability of the model, measurements of expectations and structure of dimensions. "However, due to its positive elements – simplicity of use and ability of instruments to provide quantitative assessment, the model has been accepted and applied for measuring quality of different types of services" (Ozretić Došen et al., 2010: 33) such as banking, (Pepur, 2006; Mei Mei et al., 2013), educational (Legčević, 2010; Behdioğlu and Şener, 2014; Ansary and Jayashree, 2014), hotel (Marković and Rapor Janković, 2013; Madar, 2014) and similar ones. There is a general attitude that results obtained by the SERVQUAL model predict the overall quality of services in a very reliable way (Khan, 2003: 121).

This model has been accepted as the key instrument for measuring immediate service quality in the medical sector and due to this reason, an ever increasing number of researchers has been using it in their work. The research results of a significant number of authors, regardless of the county or region where they were conducted, can be brought to one common conclusion: expectations of health care users are considerably higher than the actual satisfaction which implies that the service quality is not satisfactory (e.g. Anderson, 1995; Lam, 1997; Wong, 2002; Ozretić Došen et al., 2010; Papanikolaou and Zygiaris, 2012). The same conclusions have been reached by authors who conducted their research on healthcare users in private establishments (e.g. Camilleri and O'Callaghan, 1998; Sohail, 2000).

As far as the importance of individual dimensions of the SERVQUAL model is concerned, the results vary to some extent. A research which Anderson (1995) conducted in Houston by applying the SERVQUAL model proved that the most significant dimensions according to healthcare users were reliability, assurance and responsiveness, and while empathy and tangible elements, such as the building and its exterior or interior features, were considered less important, medical equipment, on the other hand, was considered extremely important. Lam (1997) reached similar conclusions in a survey conducted in Hong Kong. However, Papanikolaou and Zygiaris (2012) carried out a research which concluded that

empathy was the most important element.

Furthermore, according to reliability and validity of the SERVQUAL model in the healthcare sector, available research provides mixed results. Some authors found that SERVQUAL is reliable and valid in the health care environment (Babakus and Managold, 1992; Lam, 1997; Papanikolaou and Zygiaris, 2012), some authors have modified it to a certain point (Anderson, 1995) while others identified new dimensions. Brown and Swartz (1989) reported additional dimensions not captured by the SERVQUAL instrument – "professional credibility", "professional competence" and "communications".

However, in Croatia, there have been only a few researches on the quality of medical service by applying the SERVQUAL model. Verner (2005) conducted a research in Osijek on a sample of 434 healthcare users. The results showed a gap with every dimension of primary healthcare service quality. Ozretić et al. (2010) measured healthcare service quality in primary healthcare institutions in the city of Zagreb and the County of Zagreb on a sample of 181 examinees. They have also stressed a gap for all dimensions of services and the greatest being for the dimensions of responsiveness, assurance and reliability. The study that refers to only one healthcare institution was conducted by Bajto and Kondić (2005) who measured customers' satisfaction with the Public municipal hospital in Našice, where the unsatisfactory elements of healthcare service were medical equipment and communication between the medical staff and the patients. Marković et al. (2014) who measured quality in one specialty hospital for medical rehabilitation by applying a modified SERVQUAL model, have found the greatest gap in social activities and recreational programs offered in that hospital.

In all these previously mentioned studies in Croatia, the authors have not analyzed whether socio-demographic characteristics of the examinees generate significant differences in the perception of healthcare service quality. In studies of foreign authors, socio-demographic variables were mostly proven to be inconsistent and weak predictors of patients' satisfaction (e.g. Mummalaneni and Gopalakrishna, 1995).

The lack of available research indicates the conclusion that there are still not enough relevant data in Croatia which could identify the level of contentment of medical services users. Reports of institutes

about the quality of doctors' work and efficacy of individual doctors' offices mainly focus on financial indicators of efficacy whereas patients' opinions have almost entirely been neglected. Everything mentioned consequently, justifies this paper and the analysis that was conducted.

### 3. Research methodology

This empirical study reveals customer satisfaction with service quality in primary health care institutions. Therefore, the main objectives of this study are to:

- establish whether there is a difference between patients' expectations and their satisfaction with the received health care;
- investigate whether there is a difference in perception of provided medical service quality among examinees regarding their gender, age, employment status and frequency of service usage;
- provide useful information by applying SERVQUAL instruments to healthcare providers in public institutions of primary healthcare services in the city of Šibenik in order for them to make valid decisions regarding possible improvement of service quality;
- establish reliability of the SERVQUAL model for the medical sector;
- analyze service quality dimensions that can be determined in the medical sector by using factor analysis.

According to the literature review and the defined goals, the following hypotheses were proposed:

H1: There is a statistically significant difference between users' expectations and their satisfaction with given medical care in public institutions of primary healthcare in Šibenik.

H2: There is no statistically significant difference in perception of given healthcare service quality among examinees regarding their gender.

H3: There is no statistically significant difference in perception of given healthcare service quality among examinees regarding their age.

H4: There is no statistically significant difference

in perception of given healthcare service quality among examinees regarding their employment status.

H5: There is no statistically significant difference in perception of given healthcare service quality among examinees regarding their frequency of using health care services.

H6: The SERVQUAL model is reliable for measuring service quality in the health care sector.

H7: It is possible to confirm the original dimensions from the SERVQUAL model into the health care sector by factor analysis.

The questionnaire consisted of three parts. In the first part, the expectations of examinees were measured with regard to the quality of primary healthcare services in general, while in the second, the customers' perception of the provided services were measured. The third part contained questions regarding gender, age, employment status, frequency of using services in primary healthcare public institutions and use of medical services in private institutions of primary healthcare. At the end of the questionnaire, examinees were asked to express their satisfaction with the quality of services in primary healthcare institutions by giving a single evaluation mark.

The questionnaire was prepared according to dimensions from the SERVQUAL model and adjusted to the specific characteristics of medical services. After a pre-testing was conducted on 8 examinees, the range of the questionnaire was reduced from the initial 22 to 20 claims. Two items of the original SERVQUAL instrument were deleted because of their unsuitability for the research context and due to the shown lack of understanding by the questioned respondents. The final questionnaire consisted of two sets of 20 items.

The Likert scale of 5 degrees was used to measure the quality of expected and provided service, instead of 7 degrees proposed by Zeithaml, Parasuraman and Malhotra (2002). The reason is the fact that grading from 1 to 5 is generally accepted in Croatia (eg. Legčević, 2009; Ozretić Došen et al., 2010; Brumini et al., 2012; Raspor et al., 2013), so it was believed that the examinees would find it easier to evaluate statements according to notions and dimensions.

The main population in this survey consisted of all users of services in primary healthcare public institutions in Šibenik over the age of 16. The question-

naire was not intended for children younger than 16 since parents' consent would have been necessary, which would complicate the research. In addition, it was assumed that some of the concepts and terms may not have been fully comprehended on their part. The sample thus consisted of persons of eligible age who were users of services in primary healthcare public institutions in Šibenik and were willing to participate. All the doctors in whose offices this study was carried out were personally contacted and acquainted with the way and purpose of the study providing their cooperation in the further research. Having obtained the doctors' permission, the survey was conducted. In the course of two months three educated and experienced examiners repeatedly visited eight offices of family medical practice located in different parts of Šibenik. The participants were approached by an interviewer while waiting for their turn to be received by doctors and they were asked to participate in a study that measures service expectations about particular health care. They were assured of the anonymity and the confidentiality of their responses. Participants were first given the expectations version of the SERVQUAL questionnaire. After the visit, participants were approached again by the interviewer and they were kindly asked to complete the second part of the questionnaire, which included the perceptions version of SERVQUAL.

Input and data processing were finalized by using the statistical package IBM SPSS Statistics 22. To enable ease of data entry, questions were precoded. Data were analyzed using descriptive, bivariate (paired sample t-test, analysis of variance - ANOVA) and multivariate (exploratory factor analysis and reliability analysis) statistical analyses. Descriptive and bivariate analyses were performed to evaluate customer expectations and perceptions of primary healthcare service quality, as well as to establish any significant difference between mean scores of perceived and expected service. The classical approach of applying the Cronbach criterion was used to assess reliability of the model that surveyed quality of services in primary medical healthcare. The closer the coefficient is to 1, the better. Coefficients higher than 0.6 were considered acceptable, indicating reasonable internal consistency reliability (Hair et al., 2006). Moreover, exploratory factor analysis was conducted to gain a better understanding of the service attribute structure. The objective of the analysis was to summarize the information contained in the

original 20 variables into smaller sets of explanatory composite factors, which define the fundamental constructs assumed to underline the original variables. Principal Component Analysis with Varimax rotation was used. In order to adequately apply this technique, several conditions should be respected. Firstly, the ratio between sample and number of variables should be at least five and the maximum size of the sample should not be below 200, and this was respected. The Kaiser-Meyer-Olkin's measure (KMO) should be greater than 0.7 and is inadequate if it is less than 0.5 (Stewart, 1981). The KMO measure indicates whether or not enough items are predicted by each factor. Further, the significance value of Bartlett's sphericity test should be less than 0.05 (Leech et al., 2005). This means that the variables are correlated highly enough to provide a reasonable basis for factor analysis. Finally, items with eigenvalues equal or greater than 1, a solution with at least 60% of the total variance explained, factor loadings above 0.5, and factors, which contain at least three items, were retained. The research was conducted in December 2014 and January 2015.

### 3.1 Applicability of instrument while measuring healthcare service quality

As already mentioned, the classical approach of applying the Cronbach criterion was used to assess reliability and internal consistency of the model that surveyed quality of services in primary medical health care.

The total value for the coefficient of reliability that refers to expectations is .885 whereas for real satisfaction is .953.

All specific values for each variable surpasses the recommended level of 0.6 ranging from .875 to .955. This implies that the coefficient of reliability while using characteristics of SERVQUAL instruments in the health care sector does not distinguish itself significantly from other service branches. The hypothesis H6 is, therefore, confirmed.

An additional factor analysis or sensible grouping of quality characteristics in a smaller number of hidden variables or quality dimensions was also conducted which tried to confirm the "a priori" accepted theoretical model of Parasuranam et al. (1988), according to which the concept of service quality

Table 1 Cronbach's coefficients for the consistency of the study tool

Axes	Number of variables	Cronbach's Alpha coefficients	Range of values Cronbach's Alpha coefficients according to variables	
			Min	Max
Expectations	20	.885	.875	.885
Real satisfaction	20	.953	.949	.955

Source: Authors

has five dimensions. The factor analysis was conducted by the Principal Component Method and 20 questions on perception of healthcare services provided its realization.

Table 2 Kaiser-Meyer-Olkin test and Bartlett test sphericity

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.946
Bartlett's Test of Sphericity	Approx. Chi-Square	3111.203
	df	190
	Sig.	.000

Source: Authors

The result of the KMO test of .946 can be considered satisfactory since it is higher than the limit of acceptability 0.5. The Bartlett's Test was significant (p = .000) meaning that there are strong correlations between the items in each factor. Hence, it was justified to conduct the exploratory factor analysis.

In conducting the factor analysis, the Varimax rotation was used with the purpose of having a simpler interpretation of results. The analysis for the expectations scale extracted three factors whose eigenvalues are higher than 1. Most of the factor loadings were greater than 0.6, implying a reasonably high correlation between extracted factors and their individual items.

Table 3 Rotated factor matrix

Variables	Factor 1	Factor 2	Factor 3
	reliability, responsiveness and empathy	tangibility	assurance
P1		.775	
P2		.778	
P3		.657	
P4		.611	
P5	.754		
P6	.763		
P7	.767		
P8	.825		
P9	.757		
P10	.696		
P11	.782		
P12	.689		
P13	.752		
P14	.730		
P15	.667		
P16	.532		.539
P17			.588
P18	.636		
P19			.780
P20	.607		.599

Extraction Method: Principal Component Analysis.  
Rotation Method: Varimax with Kaiser Normalization.  
a. Rotation converged in 7 iterations.

Source: Authors

Assertions 16 and 20 overlap between the first and the third factor but assertion 16 is grouped in the third and assertion 20 in the first factor due to a slightly greater factor coefficient. This criterion with overlapping was used by the authors of the SERVQUAL model themselves (Parasuraman et al., 1994).

Having identified the factors, a group of variables involved in this factor or their internal consistency were researched. Values of Cronbach if Item Deleted for all the variables included in factor 1 are between .951 and .955, for all the variables included in factor 2 are between .803 and .846, and for variables included in factor 3 are between .817 and .828 which indicates that all variables fit very well into factors and excluding any variable would not have any influence on increasing that coefficient.

However, dimensions established with this analysis are not completely identical to the original SERVQUAL dimensions. The results show that two original dimensions, tangibility and assurance, form two separate factors. The first factor consists of characteristics of three integrated dimensions: reliability, responsiveness and empathy. The hypothesis H7 is therefore rejected.

**Table 4 Characteristics of the respondents (N=218)**

Characteristics	Modality	Number of respondents	Percentage of respondents
Gender	male	110	50.5
	female	108	49.5
Age	16-29	71	32.6
	30-49	76	34.9
	50 and more	71	32.6
Employment status	student	31	14.2
	employed	101	46.3
	unemployed	53	24.3
	retiree	33	15.1
Frequency in usage of services	often	52	23.9
	several times a year	145	66.5
	rarely	21	9.6
Usage of services also in private institutions	yes	87	39.9
	no	131	60.1

Source: Authors

#### 4. Research results

Out of a total of 276 patients approached, 218 completed both the expectations and the perceptions version of the questionnaire, while 46 refused to participate in the study and 12 refused to complete the post-measure. Accordingly, the final results of empirical research were obtained by analyzing 218 questionnaires. The size of the sample in this research is acceptable (N>200), and this was the prerequisite for application of used statistical methods. Table 4 shows the results of research with regard to the characteristics of the respondents.

The sample included almost an equal number of male (50.5%) and female (49.5%) examinees. The majority of those examined belong to the age group between 30 and 49 (34.9%). According to employment status, the largest portion are employed persons (46.3%). It was also analyzed how often examinees use services of public healthcare institutions. In majority of cases the basic determinant to define a frequent visitor of family doctors is the number of visits. According to Vrca Botica (2003), a frequent patient is the one who makes 8 visits in the course of one year. The mentioned criterion was used in this research.

**Table 5 Comparison of average ratings of examinees' expectations and perceptions – according to variables from the SERVQUAL model**

No. of variable	Variable	Mean		Gap	t	Sig.
		E	P			
1	Modern-looking equipment	4.62	3.09	-1.53	20.258	.000
2	Visually appealing physical facilities	4.37	3.25	-1.12	14.683	.000
3	Neat medical staff	4.65	4.02	-0.63	9.398	.000
4	Clean medical equipment and devices	4.84	3.83	-1.01	16.126	.000
5	Service without delays	4.61	3.19	-1.42	16.455	.000
6	Interest of medical staff in solving patients' problems	4.60	3.25	-1.35	17.595	.000
7	Performing services right the first time	4.64	3.45	-1.19	15.299	.000
8	Performing service in the promised time	4.62	3.21	-1.41	16.793	.000
9	Performing service without mistakes	4.61	3.29	-1.32	16.676	.000
10	Knowing the exact time when service will be performed	4.47	3.24	-1.23	15.808	.000
11	Medical staff provides prompt service	4.49	2.90	-1.59	18.865	.000
12	Willingness to help patients	4.64	3.47	-1.17	15.185	.000
13	Medical staff has time to answer patients' questions	4.31	3.06	-1.25	13.491	.000
14	Medical staff instills confidence	4.65	3.32	-1.33	18.076	.000
15	Feeling safe and secure during examination	4.71	3.49	-1.22	15.060	.000
16	Courteous medical staff	4.54	3.46	-1.08	12.065	.000
17	Medical staff has knowledge to answer questions	4.56	3.25	-1.31	17.969	.000
18	Medical staff provides personal attention	4.16	3.17	-0.99	11.254	.000
19	Appropriate working hours	4.09	3.72	-0.37	3.977	.000
20	Understanding patients' specific needs	4.15	3.27	-0.88	10.598	.000

Source: Authors

Due to greater reliability of the results, it was desirable to have the majority of frequent patients (8 or more times a year or at least several times) and this was assured in the sample (only 9.6% of the examinees use services rarely, less than once a year). The greatest number of examinees (66.5%) uses services of primary healthcare institutions several times per year. It is extremely interesting that 39.9% examinees along with services in the primary healthcare

public sector, use services of private institutions of primary health care.

Cross-analysis according to age and gender showed that males between the ages of 30 and 50 form the largest proportion of the total number (21% of all examinees) whereas women between 14 and 29 create the smallest proportion (12%). When analyzed according to employment status and frequency of service usage, it was found that the greatest num-

ber of examinees is employed and uses primary healthcare services several times a year (34%) and the smallest proportion were pensioners who use services rarely (1%).

When we analyze the results of the survey and research shown in Table 3, which are based on answers about expectations and perceptions of the characteristics of service quality in primary healthcare institutions, they visibly suggest that expectations are considerably high. Average values of expectations considered through notions range between 4.09 and 4.84. The majority of examinees have the highest expectations regarding cleanliness and tidiness of medical equipment and instruments followed by the wish to feel safe and secure during examinations. However, it can generally be stated that expectations tend to be relatively high in all claims and the patients tend to be more "demanding" regarding the quality they expect from healthcare services since there was only a small proportion of those who have low expectations and are satisfied or relatively satisfied with mediocre (or even below average) service.

Furthermore, when we observe real satisfaction, average marks range from extremely low 2.90 (it refers to speed of providing a service) to 4.02 (refers to tidiness and cleanliness of the staff). This can be explained with the fact that "patients wait too long in doctors' offices probably due to the excessive number of patients, no functional system of making appointments, the great number of repeated examinations conditioned by long processing and complicated administrative procedures. Other probable reason can be the socio-economic status of patients who are consequently searching for solutions to all their health problems in primary healthcare institutions and occasionally insufficient education of doctors" (Mazzi et al., 2006). Relatively low ratings refer to real satisfaction for time related notions of medical staff and their dedication to each patient and the individual approach. This derives from present management in health where "doctors have less time per patient but are more involved with diagnostics and informatics" (Mazzi et al., 2006). Consequently elements of communication, listening to problems, advising and the main task of family doctors have degenerated.

Based on ratings of expectations and perception, a gap has been calculated and it represents a very good indicator of the overall quality of services in primary health care in Šibenik. All 20 variables have

a negative gap which means that perceptions are lower than expectations and the quality of services in primary healthcare institutions is not satisfactory. These results lead to the conclusion that there is definitely the need to improve quality of services that institutions of primary healthcare in the city of Šibenik provide to their patients and specifically the speed of providing the mentioned services since the greatest gap (-1.59) is recorded for this variable. We should also emphasize variable 1 from the questionnaire which related to the modernity of equipment in primary healthcare institutions and which also had a relatively high gap (-1.53). Examinees are most satisfied with the working hours of institutions but this result cannot be considered as satisfactory since this question also reveals higher expectations than actual satisfaction.

As expected, and seen in previous studies (e.g. Ozretić Došen et al., 2010.; Marković et al., 2014), the results of paired-samples t - test showed that for examinees and with level of significance of 5% there is a statistically significant difference between expected and perceived assessment for all analysed characteristics of services in primary health care in Šibenik. With the above mentioned the hypothesis H1 has been confirmed.

#### 4.1 Expected and real satisfaction of examinees regarding their gender, age, employment status and usage frequency

Four one-way analysis of variance with gender, age (as category variable), employment status and usage frequency as independent variables, and overall satisfaction with medical services as dependent variable, were calculated in order to establish whether there is difference in real satisfaction with healthcare services in primary healthcare institutions regarding patients' socio-demographic characteristics. The Scheffe post hoc test was also conducted for those notions where a statistically significant difference in the level of satisfaction between examinees was established.

The results of analysis on the whole sample showed that male examinees tend to be more satisfied with healthcare services than women but this difference is not statistically significant ( $p=.915$ ). The hypothesis H2 is hence approved.

**Table 6 Differences in assessment of service quality by examinees regarding their socio-demographic characteristics**

Characteristics	Modality	N	Mean	St. dev.	Std. Error	Testing value
Gender	male	110	3.34	.838	.080	F = .107 p = .915
	female	108	3.32	.852	.082	
Age	16-29	71	3.28	.848	.101	F = .348 p = .706
	30-49	76	3.31	.838	.097	
	50 and more	71	3.39	.853	.101	
Employment status	student	31	3.29	.902	.162	F = 3.744* p = .012
	employed	101	3.50	.844	.084	
	unemployed	53	3.04	.733	.101	
	retiree	33	3.30	.847	.147	
Usage frequency	often	52	3.10	1.034	.143	F = 3.497* p = .032
	several times a year	145	3.37	.754	.063	
	rarely	21	3.62	.805	.176	

\*F is statistically relevant on the risk level of 5%.

Source: Authors

No significant differences were noticed regarding assessment of service quality among examinees of different ages ( $p=.706$ ). Consequently, the hypothesis H3 is accepted.

Considering that the analysis of variance showed that there is a statistically significant difference in satisfaction with medical services regarding employment status ( $p=.012$ ), the hypothesis H4 has been rejected. Scheffe post hoc test showed that examinees who are employed are statistically more satisfied with healthcare service quality in relation to unemployed examinees ( $p=.013$ ), whereas the difference between all other groups of examinees regarding employment status is not statistically significant.

The analysis also established that there is a statistically significant difference in satisfaction with healthcare services regarding service usage frequency ( $p=.032$ ) which is evidence for rejecting the hypothesis H5. The Scheffe post hoc test showed that there is a difference between examinees who use services often and those who use them less than once a year. Although it is questionable, due to the marginal results ( $p=.055$ ), whether the mentioned difference on the level of significance of 5% can be defined as statistically significant, according to Rozga (2012) it is with no doubt about "practical significance" that has to be emphasized.

These results partially differ from those obtained in similar researches conducted up to present time. Namely, in the previously conducted studies, the socio-demographic variables were proven to be inconsistent and weak predictors of the patients' satisfaction. Furthermore, it was concluded that patients' assessments depended more on characteristics of care themselves rather than on socio-demographic characteristics of patients (Mummalaneni and Gopalakrishna, 1995). Campbell et al. (2001) have established that only the patients' age had a significant effect on satisfaction. Contrary to the just mentioned, the results of this study show some social characteristics which influence healthcare service satisfaction whereas the influence of demographic characteristics has not been established.

## 5. Discussion

The study provides important implications for theory and practice. The findings of this study have contributed to the continuing enhancement of the measurement of service quality in the primary healthcare sector giving important insights for healthcare service providers about patients' wants,

needs and attitudes. Implications suggest that primary healthcare public institutions in Šibenik are not providing the level of service quality demanded by patients. From the carried out gap analysis, the findings also suggest that primary healthcare public institutions need to improve all the dimensions of service quality.

Although the SERVQUAL scale has been widely used to measure service quality in a variety of industries, there is an evident lack of academic research regarding the primary healthcare service quality. Thus, this study contributed to the conceptualization and operationalization of service quality in the primary healthcare sector. Our results suggest, however, that the instrument may not be easily generalizable to primary health care doctors or health-care service in general. The dimensions identified in this study reflect only partially the SERVQUAL dimensions.

The results of this study should be viewed in light of the study's limitations. First, they cannot be generalized on all primary health care services, since the research was primarily oriented towards services provided in general practice clinics excluding in this way dental practices, emergency services, occupational services and gynecological clinics which all have an unmistakable importance in the selection of the primary healthcare system. Second, the research was performed only on the territory of Šibenik and therefore cannot be concluded for the primary health care services in general. Ultimately, despite the fact that in contemporary scientific literature in the field of quality there is strong emphasis on the crucial importance of users' demands as the main criterion of quality, these demands should not be based solely on the patient perspective.

## 6. Conclusion

All set goals were achieved with the empirical research. By quantitatively applying the SERVQUAL instruments, we have primarily given useful information to healthcare providers in primary healthcare institutions in Šibenik in order to enable making valid decisions about possible improvements in the service quality.

As expected, and seen in previous studies it has been defined that there is a statistically significant difference between the examinees' expectations and their satisfaction with the received medical services and that expectations are statistically higher than the realized satisfaction which, again, leads to the conclusion that quality of medical services in primary healthcare public institutions in Šibenik is not satisfactory and that enough effort has not been made in order to increase the patients' contentment.

When it comes to satisfaction with specific elements of medical services, it has been concluded that the examinees are least pleased with the duration of time necessary to have physical check-ups and with insufficiently modern medical equipment. We should definitely emphasize that the research has recorded the way in which the examinees had the highest expectations from tangible elements of medical services whereas in similar studies conducted in, for instance, banking (Pepur, 2006; Mečev and Grubišić, 2013) the participants had the lowest expectations from the tangible dimension. This may be explained with a well-known fact that cleanliness and tidiness are generally associated with good health.

It was established that demographic determinants of age and gender do not generate significant differences in the perception of service quality, whereas there is a statistically significant difference in satisfaction with service quality regarding employment status and frequency of using services.

Ultimately, it can be concluded that this research should be conducted in regular periodical intervals in the future in order to reach a relevant judgment about trends in quality of services in primary healthcare institutions in Šibenik and its influence on patient satisfaction. Likewise, future studies should include perceptions of employees in primary healthcare institutions allowing them to be compared with attitudes of patients which would certainly help identify differences.

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Dijana Mečev  
Ivana Kardum Goleš

## MJERENJE KVALITETE USLUGE U USTANOVAMA PRIMARNE ZDRAVSTVENE ZAŠTITE: SERVQUAL LJESTVICA

### SAŽETAK

Svrha ovoga istraživanja je ispitati percepciju kvalitete usluge korisnika u javnim ustanovama primarne zdravstvene zaštite u Šibeniku. Istraživanje je za jedan od ciljeva imalo istražiti postoji li razlika između očekivanja korisnika i njihovoga zadovoljstva pruženim zdravstvenim uslugama. Budući da je za sve SERVQUAL dimenzije utvrđen negativan jaz, rezultati ukazuju na činjenicu da bi ustanove primarne zdravstvene zaštite trebale poboljšati kvalitetu svojih usluga prema svim analiziranim dimenzijama. Također se istražilo postoji li razlika u percepciji ostvarene kvalitete zdravstvene usluge između ispitanika s obzirom na spol, dob, radni status i učestalost korištenja zdravstvenih usluga. Utvrđeno je da demografske odrednice dob i spol ne generiraju značajne razlike u percepciji kvalitete zdravstvenih usluga dok postoji značajna razlika u zadovoljstvu zdravstvenim uslugama s obzirom na radni status i učestalost korištenja usluga. Dobiveni rezultati djelomično se razlikuju od onih dobivenih u do sada provedenim sličnim istraživanjima. Provedena faktorska analiza nije potvrdila „a priori“ prihvaćeni teorijski model Parasuramana et al. (1988), prema kojem se koncept kvalitete usluge sastoji od pet dimenzija, već su u kontekstu percipirane kvalitete primarne zdravstvene usluge identificirana tri visoko pouzdana faktora.

**Ključne riječi:** primarna zdravstvena zaštita, SERVQUAL, faktorska analiza, analiza pouzdanosti

**Dražen Koški**  
Josip Juraj Strossmayer University of Osijek  
Faculty of Economics in Osijek  
Trg Ljudevita Gaja 7,  
31000 Osijek, Croatia  
dkoski@efos.hr  
Phone: +38531224486

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# **ANALYZING DISEQUILIBRIUM IN THE BALANCE OF PAYMENTS: THE CASE OF BOSNIA AND HERZEGOVINA**

## **ABSTRACT**

For many years, Bosnia and Herzegovina's current account balance has been in deficit. The goal of the research described in this paper is to investigate the causes and sources of financing this deficit. Hence, an analysis of disequilibrium measures in the balance of payments was conducted for the past five-year period, or, more precisely, from 2010 to 2014. The analysis comprised the standard measures of disequilibrium, as well as some currently not so frequently used measures such as the basic balance, the net liquidity balance and the official settlements balance.

The cause of the current account deficit is the merchandise trade balance deficit, which is higher than the sum of the balance of services, balance of primary income and balance of secondary income surpluses. This deficit is financed largely by foreign direct investment, but also by debt instruments based on other investment, because of which the country's external debt grows.

Given that the merchandise trade balance deficit was the main cause of Bosnia and Herzegovina's current account deficit, in order to solve this problem, the country has to stimulate exports of goods and reduce its import dependence. Simultaneously, the country needs to strengthen the balance of services surplus.

**Keywords:** The balance of payments, the basic balance, the net liquidity balance, the official statements balance, measures of disequilibrium

## **1. Introduction**

For many years, Bosnia and Herzegovina's current account balance has been in deficit. The cause of this deficit is the merchandise trade balance deficit, which is higher than the sum of the balance of services, balance of primary income and balance of

secondary income surpluses. In order to settle this deficit, Bosnia and Herzegovina has to sell state-owned property or go into debt abroad. However, both options can have far-reaching consequences for Bosnia and Herzegovina's economy. Moreover, these financing sources are not infinite. Given the surpluses in other components of the balance on the current account, Bosnia and Herzegovina

should stimulate a surplus in the merchandise trade balance and simultaneously strengthen the surplus in the balance of services.

The goal of this paper is to investigate the causes and ways of financing Bosnia and Herzegovina's balance of payments deficit. Likewise, the paper mentions some consequences that this financing has (or could have) on the country's economy, considering the fact that the Central Bank of Bosnia and Herzegovina functions on the principles of a currency board.

In the paper, there is an analysis of Bosnia and Herzegovina's balance of payments in the past five-year period, i.e. from 2010 to 2014. For the analysis, the data from the International Monetary Fund database *Balance of Payments Statistics* (BOPS) are used<sup>1</sup>. The balance of payments concepts and their components are shown on the presentational basis from the Sixth Edition Balance of Payments and International Investment Position Manual (IMF, 2009). However, their amounts are presented on the sign-based presentation basis, which is described in the Fifth Edition Balance of Payments Manual (IMF, 1993). According to the sign-based presentation, the negative sign means net foreign exchange outflow, and the positive sign means net foreign exchange inflow<sup>2</sup>.

The structure of the paper is as follows. After the introduction, in the second section there is an explanation of the methodology of measuring disequilibrium in the balance of payments. Measures of disequilibrium in Bosnia and Herzegovina's balance of payments are analyzed in the third section. Besides the standard measures of disequilibrium, some currently not so frequently used measures are applied, but keeping in mind their limitations. These measures include the basic balance, the net liquidity balance and the official settlements balance. At the end of the paper, in the fourth section, the conclusion is given.

## 2. Measures of Disequilibrium in the Balance of Payments

In the accounting sense, the balance of payments, just as any other balance, always balances. The reason for this is the double-entry bookkeeping system whose application has, as a consequence, that the sum of all credit items must equal the sum of

all debit items. In the context of the balance of payments, this equality is most often shown as equality between a current account balance on the one hand and a capital and financial account balance on the other. In other words, the current account balance must be equal to the capital and financial account balance with reversed sign<sup>3</sup>. As a result, the current account deficit will be financed or settled by the capital and financial account surplus.

However, the same interpretation is valid for any other disequilibrium item of the balance of payments. A deficit in any item (or in a group of items) of the balance of payments is financed by the sum of surpluses in all other items. Technically, analytical emphasis is most often indicated by drawing a line below a particular item. In this fashion, the items that are considered autonomous are above the line – they cause the items below the line, and the items that are below the line are considered financing or accommodating ones – they result from international transactions or they are needed for financing these transactions. Thus, by drawing the line in the balance of payments one can get useful information on the ways of financing deficit items.

Over time, it became usual to draw the line below certain items in the balance of payments and to analyze their balance. For instance, if the line is drawn below imports and exports of goods, the merchandise trade balance or the balance of goods arises. Given that imports and exports are, in this case, above the line, a deficit in this balance is financed by the net surplus in all items below the line. Furthermore, if imports and exports of services are added to the balance of goods, the balance of goods and services arises. This balance is a component of the gross domestic product. By drawing the line below income inflows and outflows, the balance of primary income is obtained, and below inflows and outflows of current transfers, the balance of secondary income arises. The balance of primary income together with the balance of goods and services are components of gross national income.

All the four mentioned balances, the balance of goods, the balance of services, the balance of primary income and the balance of secondary income make up the balance on the current account. The balance on the current account is a part of the gross national disposable income. Given the equality of this balance and the balance of the capital and the financial account (with reversed sign), this balance has a special meaning in a macroeconomic analy-

sis. A current account deficit “*is tantamount to an increase in the international indebtedness of reporting country*” (Chacholiades, 1990: 295). Reversely, a current account surplus “*represents an increase in the net foreign wealth of the reporting country*” (Chacholiades, 1990: 295). In other words, a current account surplus is referred to as net foreign investment, and a current account deficit is usually called the net foreign disinvestment.

If the line is drawn below the balance on the current account and long-term capital, the basic balance is obtained. This balance “*represents an attempt to measure underlying trends, abstracting from such 'volatile' transactions as short-term capital movements*” (Cooper, 1966: 384). Except for the differences in prices of goods and services, in the long run, this balance reflects the differences in investment opportunities among countries. Put another way, “*it reflects tastes and preferences of consumers, efficiency of producers, and the time preference of all decisionmaking units*” (Bach & Balbach, 1971: 9).

However, there are several problems in the interpretation and preparation of the basic balance.

First, a deficit of this balance must be financed by a surplus of short-term capital, so sustainability of this situation in the long run and the usefulness of this balance as an indicator of long run trends in economic transactions abroad are questionable. In other words, the basic balance can be a truthful indicator of long run trends solely if it is in equilibrium. Because of this, Pippinger (1973: 11) argues that “*a deficit or surplus on current account plus long-term capital financed by a short-term capital inflow is only temporary*”.

Second, a deficit of the basic balance is not necessarily bad, if it arose due to investing abroad and if it will result in the future in return on investment. In addition, a surplus of this balance is not necessarily good if it is a result of going into debt abroad.

Third, there is a problem in the classification of capital into long and short-term capital. Because of this, Kenen warns that “*one can find as many transitory elements in the so-called 'basic' balance, even in direct investment, and one can also argue that short-term private capital has its structural component*”. Furthermore, a part of long-term liabilities can be converted into short-term ones and short-term liabilities may be renewed and so get characteristics of long-term ones. In addition, the long-term component of portfolio investment may be as volatile as

the short-term. According to Branson (1971: 222): “*Portfolio capital reacts to changes in interest differentials and credit market conditions, rather than real investment incentive*”.

Consequently, it is sometimes useful to compute the basic balance without portfolio investment, as Branson (1971) did.

The net liquidity balance is a result of drawing the line below the basic balance, short-term non-liquid capital, SDR allocation, and the net errors and omissions. In this fashion, short-term liquid capital, international reserves, liabilities to foreign official agencies and exceptional financing remain below the line. Hence, the net liquidity balance represents potential pressure on international reserves (Kemp, 1975: 20). In other words, foreigners may request conversion of their liquid claims into foreign exchange, which is a component of international reserves.

Similar to the basic balance, there are several difficulties in interpreting and computing this balance.

First, it is sometimes difficult to classify the capital into liquid and non-liquid. That which is by one criterion liquid, may be, by another criterion, non-liquid. Likewise, the net errors and omissions is the item above the line “*as if this item represents only nonliquid capital flows*” (Kuwayama, 1975: 187).

Second, given short-term private liquid capital, foreigners hold foreign exchange for transactions purposes as well, so it is inappropriate to consider all liquid liabilities to foreigners as potential pressure on international reserves. According to Kemp (1975: 20):

“*Only those foreign-held claims which are in excess of those desired for transactions purposes can be rightfully considered as a potential source of pressure on our reserve assets*”.

Hence, short-term liquid capital, which is held by foreigners for speculative purposes, may be considered as a potential danger to international reserves. In addition, Kindleberger (1969: 880) notes:

“*The liquidity definition is appropriate to a crisis but not to the steady state. It is well known that bank reserves suffer from the dilemma that in ordinary times none are needed, and that in crisis 100 percent reserves are hardly sufficient*”.

Kindlberger's statement is often confirmed in practice, so Stiglitz (2001: 13) points out:

"In studies conducted on vulnerability prior to the East Asia crisis, short-term foreign denominated liabilities did not appear to have significant explanatory power in explaining crises. Since with free convertibility, domestic "money" can be converted into dollars, the entire money supply, not just externally held debt, could be viewed as a 'claimant'".

Third, under certain circumstances, this balance may be considered as an indicator of long-term trends. For instance, if the net errors and omissions and short-term non-liquid capital by its nature are similar to long-term capital, then it is appropriate to analyze the net liquidity balance. However, if these two items are more similar to short-term capital, then the basic balance is more useful (Pippinger, 1973: 12).

The official settlements balance arises by drawing the line below the net liquidity balance and short-term liquid capital. Given that international reserves, liabilities to foreign official agencies and exceptional financing remain below the line<sup>4</sup>, this balance represents net amount of total settlements, which are made by monetary authorities to finance international transactions. Hence, this balance may be observed as an indicator of direct pressure on international reserves. In comparison with the net liquidity balance, which is an indicator of potential pressure, i.e. pressure that will happen in the future, the official settlements balance is an indicator of pressure, which has already happened (Kemp, 1975: 21).

**Table 1 The Balance of Payments**

US Dollars, Millions

Concept	2010	2011	2012	2013	2014
CURRENT ACCOUNT	-1,030.66	-1,767.39	-1,498.58	-1,029.33	-1,401.44
CAPITAL ACCOUNT	263.66	253.72	220.29	228.67	346.23
FINANCIAL ACCOUNT	666.97	1,456.01	1,147.57	581.91	895.11
NET ERRORS AND OMISSIONS	100.03	57.65	130.72	218.74	160.09

Source: The International Monetary Fund database Balance of Payments Statistics (BOPS), Available at: <http://elibrary-data.imf.org/FindDataReports.aspx?d=33061&e=170784> (Accessed on: April 15, 2015)

### 3. Analyzing Measures of Disequilibrium in Bosnia and Herzegovina's Balance of Payments

Bosnia and Herzegovina's balance of payments is presented in Table 1. Its current account is in deficit, and the capital and the financial account is in surplus. A positive sign of the net errors and omissions means that some of the foreign exchange inflows are not comprised statistically.

The causes of the current account deficit can be revealed by analysis of the current account structure, i.e. by analysis of the balance of goods, balance of services, balance of primary income and balance of secondary income. This is done in the next few sections.

#### 3.1 The Balance on the Current Account

##### 3.1.1 The Balance of Goods

A high deficit in Bosnia and Herzegovina's balance of goods is evident from Table 2. It will be shown later that this deficit is the only cause of the current account deficit. Imports of goods as well as exports reached their maximum in 2014. In relation to 2010, the exports imports coverage ratio fell in 2014 approximately five percentage points.

**Table 2 The Balance of Goods**

US Dollars, Millions

Concept	2010	2011	2012	2013	2014
<b>Goods</b>	<b>-5,022.38</b>	<b>-5,748.58</b>	<b>-5,251.31</b>	<b>-4,973.91</b>	<b>-5,491.56</b>
<b>Credit</b>	<b>3,230.77</b>	<b>4,109.86</b>	<b>3,837.31</b>	<b>4,363.28</b>	<b>4,490.23</b>
General Merchandise: Export	3,228.34	4,101.32	3,824.49	4,339.48	4,482.52
Non-monetary Gold: Export	2.43	8.54	12.82	23.81	7.71
<b>Debit</b>	<b>-8,253.15</b>	<b>-9,858.45</b>	<b>-9,088.62</b>	<b>-9,337.20</b>	<b>-9,981.79</b>
General Merchandise: Import	-8,248.93	-9,853.29	-9,084.97	-9,335.69	-9,980.55
Non-monetary Gold: Import	-4.22	-5.16	-3.65	-1.51	-1.24
Exports Imports Coverage in %	60.85	58.31	57.79	53.27	55.02

Source: The International Monetary Fund database Balance of Payments Statistics (BOPS), Available at: <http://elibrary-data.imf.org/FindDataReports.aspx?d=33061&e=170784> (Accessed on: April 15, 2015), and author's calculations.

The growth rates of goods imports and exports in relation to the previous year and annually on average, are shown in Table 3.

It is needed to note that, on average, exports of goods rise 8.58%, and imports of goods rise 4.87%. Yet, given low exports /imports coverage ratio, and taking as a basis 2014, Bosnia and Herzegovina would need 22.96 years to balance its imports and exports of goods, i.e. that its exports /imports coverage ratio reaches 100%<sup>5</sup>.

##### 3.1.2 The Balance of Services

From 2010 to 2014, Bosnia and Herzegovina's balance of services was in surplus, which is evident from Table 4. However, in relation to the balance of goods deficit, this deficit amounted to only 26.34% in 2010 and 22.54% in 2014. The manufacturing services have the highest share in this deficit and traveling and transport services are next.

**Table 3 Growth Rates of the Balance of Goods**

%

Concept	2010	2011	2012	2013	2014	Annual growth rate
<b>Goods</b>	-	14.46	-8.65	-5.28	10.41	2.26
<b>Credit</b>	-	27.21	-6.63	13.71	2.91	8.58
General Merchandise: Export	-	27.04	-6.75	13.47	3.30	8.55
Non-monetary Gold: Export	-	251.44	50.12	85.73	-67.62	33.46
<b>Debit</b>	-	19.45	7.81	2.74	6.90	4.87
General Merchandise: Import	-	19.45	-7.80	2.76	6.91	4.88
Non-monetary Gold: Import	-	22.27	-29.26	-58.63	-17.88	-26.37

(-) Indicates that a figure is zero.

Note: The annual growth rate is calculated using geometric mean.

Source: Author's calculations

Table 4 The Balance of Services

US Dollars, Millions

Concept	2010	2011	2012	2013	2014
Services	1,322.77	1,313.56	1,180.55	1,225.47	1,237.95
<b>Total Credit</b>	<b>1,863.67</b>	<b>1,870.78</b>	<b>1,696.76</b>	<b>1,739.87</b>	<b>1,789.77</b>
<b>Total Debit</b>	<b>540.91</b>	<b>557.22</b>	<b>516.21</b>	<b>514.40</b>	<b>551.82</b>
Manufacturing Services on Physical Inputs Owned by Others, Credit	659.77	660.00	564.81	518.51	541.34
Manufacturing Services on Physical Inputs Owned by Others, Debit	-2.63	-12.02	-0.96	1.45	0.02
Maintenance and Repair Services n.i.e., Credit	2.98	2.60	3.26	0.76	1.11
Maintenance and Repair Services n.i.e., Debit	-5.11	-6.68	-6.39	-4.80	-3.04
Transport, Credit	281.47	326.40	302.38	333.83	345.15
Transport, Debit	-180.60	-208.31	-209.08	-220.35	-257.86
Travel, Credit	588.78	634.77	615.05	684.94	707.06
Travel, Debit	-193.68	-159.73	-139.33	-133.18	-135.22
Other Services, Credit	330.68	247.01	211.25	201.83	195.12
Other Services, Debit	-158.89	-170.49	-160.45	-157.51	-155.72

Source: The International Monetary Fund database Balance of Payments Statistics (BOPS), Available at: <http://elibrary-data.imf.org/FindDataReports.aspx?d=33061&e=170784> (Accessed on: April 15, 2015)

Annual average growth rates of total credit and debit items in the balance of services are negligible. The other items of this balance changed more, annually on average, but due to their low share in the structure of the balance of services, they do not affect significantly the changes of total credit and debit items.

Table 5 shows the growth rates of services imports and exports in relation to the previous year and annually on average.

Table 5 Growth Rates of the Balance of Services

%

Concept	2010	2011	2012	2013	2014	Annual growth rate
Services	-	-0.70	-10.13	3.81	1.02	-1.64
<b>Total Credit</b>	<b>-</b>	<b>0.38</b>	<b>-9.30</b>	<b>2.54</b>	<b>2.87</b>	<b>-1.01</b>
<b>Total Debit</b>	<b>-</b>	<b>3.02</b>	<b>-7.36</b>	<b>-0.35</b>	<b>7.27</b>	<b>0.50</b>
Manufacturing Services on Physical Inputs Owned by Others, Credit	-	0.03	-14.42	-8.20	4.40	-4.83
Manufacturing Services on Physical Inputs Owned by Others, Debit	-	357.03	-92.01	-251.04	-98.62	-
Maintenance and Repair Services n.i.e., Credit	-	-12.75	25.38	-76.69	46.05	-21.88
Maintenance and Repair Services n.i.e., Debit	-	30.72	-4.34	-24.88	-36.67	-12.18
Transport, Credit	-	15.96	-7.36	10.40	3.39	5.23
Transport, Debit	-	15.34	0.37	5.39	17.02	9.31
Travel, Credit	-	7.81	-3.11	11.36	3.23	4.68
Travel, Debit	-	-17.53	-12.77	-4.41	1.53	-8.59
Other Services, Credit	-	-25.30	-14.48	-4.46	-3.32	-12.36
Other Services, Debit	-	7.30	-5.89	-1.83	-1.14	-0.50

(-) Indicates that a figure is zero.

Note: annual growth rate is calculated using geometric mean.

Source: Author's calculations

### 3.1.3 The Balance of Primary Income

Over the observed period, Bosnia and Herzegovina's balance of primary income was in surplus, which is apparent from Table 6. However, in comparison with the balance of goods deficit, this surplus was relatively small – in 2010, it amounted to 5.55% of the balance of goods deficit, and in 2014 it amounted to only 3.81%. The main cause of the primary income surplus was foreign exchange inflow based on the compensation of employees.

The growth rates of the primary income components in relation to previous year and annually on average, are presented in Table 7.

Table 6 The Balance of Primary Income

US Dollars, Millions

Concept	2010	2011	2012	2013	2014
PRIMARY INCOME	279.52	149.67	155.80	226.91	209.51
Total Credit	596.66	665.33	572.02	573.68	628.73
Total Debit	-317.14	-515.66	-416.22	-346.77	-419.22
Compensation of Employees, Credit	479.28	529.54	471.60	471.44	518.93
Compensation of Employees, Debit	-12.57	-13.01	-11.08	-10.74	-8.92
Investment Income, Credit	66.20	93.23	71.99	72.10	81.14
Direct Investment Income	3.63	2.20	3.70	-1.29	2.25
Portfolio Investment Income	...	...	...	...	...
Other Investment Income	35.44	49.26	35.73	36.48	36.69
Income on Reserve Assets	27.13	41.77	32.56	36.91	42.20
Investment Income, Debit	-304.57	-502.65	-405.14	-336.03	-410.30
Direct Investment Income	-78.55	-276.41	-206.64	-187.31	-262.71
Portfolio Investment Income	-0.89	-0.33	-1.07	-0.39	-0.10
Other Investment Income	-225.14	-225.91	-197.43	-148.34	-147.48
Other Primary Income, Credit	51.19	42.56	28.42	30.14	28.66
Other Primary Income, Debit	...	...	...	...	...

(...) Indicates a lack of statistical data that can be reported or calculated from underlying observations.  
Source: The International Monetary Fund database Balance of Payments Statistics (BOPS), Available at: <http://elibrary-data.imf.org/FindDataReports.aspx?d=33061&e=170784> (Accessed on: April 15, 2015)

Annually on average, the primary income surplus fell 6.95%, which is evident from Table 7. The cause of this fall was the rise of debit items in amount of 7.23 in relation to the rise of credit items in amount of 1.32%. The growth of the debit items was caused by foreign exchange outflow based on foreign direct investment.

Table 7 Growth Rates of the Balance of Primary Income

%

Concept	2010	2011	2012	2013	2014	Annual growth rate
PRIMARY INCOME	-	-46.45	4.10	45.64	-7.67	-6.95
Total Credit	-	11.51	-14.02	0.29	9.60	1.32
Total Debit	-	62.60	-19.28	-16.69	20.89	7.23
Compensation of Employees, Credit	-	10.49	-10.94	-0.03	10.07	2.01
Compensation of Employees, Debit	-	3.50	-14.83	-3.07	-16.95	-8.22
Investment Income, Credit	-	40.83	-22.78	0.15	12.54	5.22
Direct Investment Income	-	-39.39	68.18	-134.86	-274.42	-
Portfolio Investment Income	-	-	-	-	-	-
Other Investment Income	-	39.00	-27.47	2.10	0.58	0.87
Income on Reserve Assets	-	53.96	-22.05	13.36	14.33	11.68
Investment Income, Debit	-	65.04	-19.40	-17.06	22.10	7.73
Direct Investment Income	-	251.89	-25.24	-9.35	40.25	35.23
Portfolio Investment Income	-	-62.92	224.24	-63.55	-74.36	-42.10
Other Investment Income	-	0.34	-12.61	-24.86	-0.58	-10.04
Other Primary Income, Credit	-	-16.86	-33.22	6.05	-4.91	-13.50
Other Primary Income, Debit	-	-	-	-	-	-

(-) Indicates that a figure is zero.  
Note: annual growth rate is calculated using geometric mean.  
Source: Author's calculations

### 3.1.4 The Balance of Secondary Income

The balance of secondary income is presented in Table 8. This balance has the highest surplus in Bosnia and Herzegovina's current account. In 2010 the secondary income surplus amounted to 47.58% of the balance of goods deficit, and in 2014 it amounted to 48.12%. Current transfers from financial and nonfinancial corporations, households and NPISHs have the highest share in this surplus<sup>6</sup>. Personal transfers make up a significant share in the secondary income surplus as well.

Table 8 The Balance of Secondary Income

US Dollars, Millions

Concept	2010	2011	2012	2013	2014
<b>SECONDARY INCOME</b>	<b>2,389.44</b>	<b>2,517.97</b>	<b>2,416.38</b>	<b>2,492.21</b>	<b>2,642.66</b>
<b>Credit</b>	<b>2,563.85</b>	<b>2,716.06</b>	<b>2,598.63</b>	<b>2,681.75</b>	<b>2,844.62</b>
General Government	234.28	212.27	208.55	224.70	255.06
Financial Corporations, Nonfinancial Corporations, Households, and NPISHs	2,329.57	2,503.79	2,390.09	2,457.05	2,589.56
Personal Transfers	1,343.03	1,428.69	1,374.11	1,457.27	1,543.09
Other Current Transfers	986.54	1,075.09	1,015.98	999.77	1,046.47
<b>Debit</b>	<b>-174.41</b>	<b>-198.10</b>	<b>-182.25</b>	<b>-189.54</b>	<b>-201.96</b>
General Government	-133.29	-149.42	-137.76	-142.28	-147.80
Financial Corporations, Nonfinancial Corporations, Households, and NPISHs	-41.12	-48.67	-44.50	-47.26	-54.15
Personal Transfers	-33.87	-38.67	-35.77	-37.71	-41.80
Other Current Transfers	-7.25	-10.00	-8.73	-9.55	-12.35

Source: The International Monetary Fund database Balance of Payments Statistics (BOPS), Available at: <http://elibrary-data.imf.org/FindDataReports.aspx?d=33061&e=170784> (Accessed on: April 15, 2015)

In Table 9, the growth rates of the secondary income components in relation to the previous year and annually on average, are presented.

According to the data which are shown in Table 9, both mentioned current transfers mildly rise, so net secondary income rise as well, annually on average by 2.55%. Due to their small share in the secondary income structure, the growth rates of other items are negligible.

Based on the present analysis, it is possible to conclude that the main cause of Bosnia and Herzegovina's current account deficit is the balance of goods deficit. This deficit is so high that it cannot be financed by the sum of surpluses in the balance of services, balance of primary income and balance of secondary income. Hence, the current account deficit is financed by foreign exchange from the capital and financial account. The analysis of Bosnia and Herzegovina's capital and financial account is presented in the next two sections.

Table 9 Growth Rates of the Balance of Secondary Income

%

Concept	2010	2011	2012	2013	2014	Annual growth rate
<b>SECONDARY INCOME</b>	-	5.38	-4.03	3.14	6.04	2.55
<b>Credit</b>	-	5.94	-4.32	3.20	6.07	2.63
General Government	-	-9.39	-1.75	7.74	13.51	2.15
Financial Corporations, Nonfinancial Corporations, Households, and NPISHs	-	7.48	-4.54	2.80	5.39	2.68
Personal Transfers	-	6.38	-3.82	6.05	5.89	3.53
Other Current Transfers	-	8.98	-5.50	-1.60	4.67	1.49
<b>Debit</b>	-	13.58	-8.00	4.00	6.55	3.73
General Government	-	12.10	-7.80	3.28	3.88	2.62
Financial Corporations, Nonfinancial Corporations, Households, and NPISHs	-	18.36	-8.57	6.20	14.58	7.12
Personal Transfers	-	14.17	-7.50	5.42	10.85	5.40
Other Current Transfers	-	37.93	-12.70	9.39	29.32	14.24

(-) Indicates that a figure is zero.

Note: annual growth rate is calculated using geometric mean.

Source: Author's calculations

### 3.1.5 The Balance on the Capital Account

The capital and financial account items are more usefully analyzed given their structure than given their changes through time. In this fashion, it is easier to conclude which capital and financial account item finances a particular item of the current account. Due to this fact, in the next section, the capital account balance and financial account balance are analyzed given their structure.

Table 10 The Balance on the Capital Account

US Dollars, Millions

Concept	2010	2011	2012	2013	2014
<b>CAPITAL ACCOUNT</b>	<b>263.66</b>	<b>253.72</b>	<b>220.29</b>	<b>228.67</b>	<b>346.23</b>
Capital Transfers, Credit	263.66	253.72	220.29	228.67	346.23
General Government	169.65	153.72	151.02	162.71	157.23
Debt Forgiveness	...	...	...	...	...
Other Capital Transfers	169.65	153.72	151.02	162.71	157.23
Financial Corporations, Nonfinancial Corporations, Households, and NPISHs	94.01	100.01	69.27	65.95	189.01
Capital Transfers, Debit	...	...	...	...	...

(...) Indicates a lack of statistical data that can be reported or calculated from underlying observations.

Source: The International Monetary Fund database Balance of Payments Statistics (BOPS), Available at: <http://elibrary-data.imf.org/FindDataReports.aspx?d=33061&e=170784> (Accessed on: April 15, 2015)

In Table 10, the capital account balance components are presented. Over the observed period, this balance is in surplus.

The structure of the balance on the capital account is presented in Table 11.

**Table 11 Structure of the Balance on the Capital Account**

Concept	2010	2011	2012	2013	2014
<b>CAPITAL ACCOUNT</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>
Capital Transfers, Credit	100.00	100.00	100.00	100.00	100.00
General Government	64.34	60.59	68.56	71.15	45.41
Debt Forgiveness	-	-	-	-	-
Other Capital Transfers	64.34	60.59	68.56	71.15	45.41
Financial Corporations, Nonfinancial Corporations, Households, and NPISHs	35.66	39.42	31.44	28.84	54.59
Capital Transfers, Debit	-	-	-	-	-

(-) Indicates that a figure is zero.

Source: Author's calculations

From Table 11 it is apparent that the causes of the capital account balance surplus are largely government transfers, and to a lesser extent, capital transfers from financial and nonfinancial corporations, households and NPISHs.

The fall of the credit items of other investment is caused by selling debt instruments, and the rise of liabilities is caused by emission of new debt instruments. Foreign direct investment inflow rises because of the rise of liabilities – foreign direct investment in equity as well as in debt instruments. Portfolio investment causes net foreign exchange outflow, mainly because of repaying liabilities to foreign creditors.

### 3.1.6 The Balance on the Financial Account

Bosnia and Herzegovina's financial account balance is shown in Table 12, and the structure of this balance is presented in Table 13. From Table 12 it is evident that the financial account has net foreign exchange inflows. The causes of these inflows are other investment and foreign direct investment. Actually, the credit items based on other investment decrease, and liabilities increase, which results in a strong foreign exchange inflow in the country.

**Table 12 The Balance on the Financial Account**

US Dollars, Millions

Concept	2010	2011	2012	2013	2014
<b>FINANCIAL ACCOUNT</b>	<b>666.97</b>	<b>1,456.01</b>	<b>1,147.57</b>	<b>581.91</b>	<b>895.11</b>
<b>DIRECT INVESTMENT</b>	<b>362.66</b>	<b>476.44</b>	<b>333.36</b>	<b>292.70</b>	<b>566.25</b>
Net Acquisition of Financial Assets	-81.18	4.83	-1.46	-22.32	5.33
Equity and Investment Fund Shares	-46.34	-13.83	-8.19	13.20	-4.42
Debt Instruments	-34.84	18.66	6.74	-35.52	9.75
Net Incurrence of Liabilities	443.84	471.61	334.82	315.02	560.92
Equity and Investment Fund Shares	148.77	343.46	161.74	291.98	281.23
Debt Instruments	295.07	128.15	173.08	23.04	279.69
<b>PORTFOLIO INVESTMENT</b>	<b>-121.01</b>	<b>-34.93</b>	<b>-10.46</b>	<b>-88.59</b>	<b>-61.77</b>
Net Acquisition of Financial Assets	-86.00	5.82	30.80	-45.92	-19.86
Equity and Investment Fund Shares	1.17	-0.15	-0.41	1.17	0.07
Debt Securities	-87.17	5.97	31.21	-47.09	-19.93
Net Incurrence of Liabilities	-35.01	-40.75	-41.26	-42.67	-41.91
Equity and Investment Fund Shares	...	...	...	...	...
Debt Securities	-35.01	-40.75	-41.26	-42.67	-41.91
<b>OTHER INVESTMENT</b>	<b>604.06</b>	<b>990.41</b>	<b>863.26</b>	<b>860.75</b>	<b>852.05</b>
Net Acquisition of Financial Assets	509.44	399.82	242.20	136.34	400.51
Other Equity	...	...	...	...	...
Debt Instruments	509.44	399.82	242.20	136.34	400.51
Net Incurrence of Liabilities	94.62	590.60	621.06	724.41	451.54
Other Equity	2.61	-7.31	1.74	0.48	-8.60
Other Debt Instruments	92.01	597.91	619.32	723.93	460.14
<b>RESERVE ASSETS (increase -)</b>	<b>-178.75</b>	<b>24.10</b>	<b>-38.59</b>	<b>-482.95</b>	<b>-461.42</b>

(...) Indicates a lack of statistical data that can be reported or calculated from underlying observations.

Source: The International Monetary Fund database Balance of Payments Statistics (BOPS), Available at: <http://elibrary-data.imf.org/FindDataReports.aspx?d=33061&e=170784> (Accessed on: April 15, 2015)

Table 13 Structure of the Balance on the Financial Account

Concept	2010	2011	2012	2013	2014
<b>FINANCIAL ACCOUNT</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>
DIRECT INVESTMENT	54.37	32.72	29.05	50.30	63.26
Net Acquisition of Financial Assets	-12.17	0.33	-0.13	-3.84	0.60
Equity and Investment Fund Shares	-6.95	-0.95	-0.71	2.27	-0.49
Debt Instruments	-5.22	1.28	0.59	-6.10	1.09
Net Incurrence of Liabilities	-66.55	-32.39	-29.18	-54.14	-62.66
Equity and Investment Fund Shares	-22.31	-23.59	-14.09	-50.18	-31.42
Debt Instruments	-44.24	-8.80	-15.08	-3.96	-31.25
PORTFOLIO INVESTMENT	-18.14	-2.40	-0.91	-15.22	-6.90
Net Acquisition of Financial Assets	-12.89	0.40	2.68	-7.89	-2.22
Equity and Investment Fund Shares	0.18	-0.01	-0.04	0.20	0.01
Debt Securities	-13.07	0.41	2.72	-8.09	-2.23
Net Incurrence of Liabilities	5.25	2.80	3.60	7.33	4.68
Equity and Investment Fund Shares	-	-	-	-	-
Debt Securities	5.25	2.80	3.60	7.33	4.68
OTHER INVESTMENT	90.57	68.02	75.23	147.92	95.19
Net Acquisition of Financial Assets	76.38	27.46	21.11	23.43	44.74
Other Equity	-	-	-	-	-
Debt Instruments	76.38	27.46	21.11	23.43	44.74
Net Incurrence of Liabilities	-14.19	-40.56	-54.12	-124.49	-50.45
Other Equity	-0.39	0.50	-0.15	-0.08	0.96
Other Debt Instruments	-13.80	-41.06	-53.97	-124.41	-51.41
RESERVE ASSETS (increase -)	-26.80	1.66	-3.36	-82.99	-51.55

(-) Indicates that a figure is zero.

Source: Author's calculations

Overall, foreign exchange inflow, based on other and foreign direct investments, finances (ignoring the net errors and omissions) the current account deficit and foreign exchange outflow based on portfolio investment. The excess of this inflow, which remains after these settlements, is evident as a rise in international reserves.

### 3.1.7 The Basic Balance, the Net Liquidity Balance and the Official Settlements Balance

The basic balance, the net liquidity balance and the official settlements balance are presented in Table 14. Given that the data on maturity of the International Monetary Fund loans are not available, it is supposed that these loans are long-term ones.

Table 14 Measures of disequilibrium in Bosnia and Herzegovina's balance of payments

Concept	2010	2011	2012	2013	2014
<b>Current Account, Goods, Net</b>	<b>-5,022.38</b>	<b>-5,748.58</b>	<b>-5,251.31</b>	<b>-4,973.91</b>	<b>-5,491.56</b>
<b>Current Account, Services, Net</b>	<b>1,322.77</b>	<b>1,313.56</b>	<b>1,180.55</b>	<b>1,225.47</b>	<b>1,237.95</b>
<b>Current Account, Goods and Services, Net</b>	<b>-3,699.62</b>	<b>-4,435.02</b>	<b>-4,070.76</b>	<b>-3,748.45</b>	<b>-4,253.61</b>
<b>Current Account, Primary income, Net</b>	<b>279.52</b>	<b>149.67</b>	<b>155.80</b>	<b>226.91</b>	<b>209.51</b>
<b>Current Account, Secondary income, Net</b>	<b>2,389.44</b>	<b>2,517.97</b>	<b>2,416.38</b>	<b>2,492.21</b>	<b>2,642.66</b>
<b>Current Account, Net</b>	<b>-1,030.66</b>	<b>-1,767.39</b>	<b>-1,498.58</b>	<b>-1,029.33</b>	<b>-1,401.44</b>
Long-term Capital	-50.48	934.56	752.67	922.11	849.30
<b>Basic Balance</b>	<b>-1,081.14</b>	<b>-832.83</b>	<b>-745.91</b>	<b>-107.22</b>	<b>-552.14</b>
Long-term Capital (Excluding Portfolio investment)	19.24	1,000.71	726.31	1,024.55	893.14
<b>Basic Balance (Excluding Portfolio investment)</b>	<b>-1,011.42</b>	<b>-766.67</b>	<b>-772.27</b>	<b>-4.78</b>	<b>-508.29</b>
SDR allocation	0.00	0.00	0.00	0.00	0.00
Short-term Nonliquid Capital	377.78	274.51	222.27	282.68	305.13
Net Errors and Omissions	96.13	57.69	133.81	218.95	166.56
<b>Net Liquidity Balance</b>	<b>-607.23</b>	<b>-500.63</b>	<b>-389.84</b>	<b>394.41</b>	<b>-80.45</b>
Short-term Liquid Capital	547.12	476.58	307.40	128.84	439.95
<b>Official Settlements Balance</b>	<b>-60.12</b>	<b>-24.05</b>	<b>-82.44</b>	<b>523.25</b>	<b>359.50</b>
<b>Financing:</b>					
Reserve Assets (Increase -)	-178.94	24.05	-38.48	-481.78	-461.69
Net Credit and Loans from the IMF	239.06	0.00	120.92	-41.47	102.19

Source: The International Monetary Fund database Balance of Payments Statistics (BOPS), Available at: <http://elibrary-data.imf.org/FindDataReports.aspx?d=33061&e=170784> (Accessed on: April 15, 2015) and author's calculations.

From Table 14 it is obvious that the basic balance is in deficit, which means that this situation is unsustainable in the long run, because Bosnia and Herzegovina has to finance this deficit by short-term liquid capital. Even if portfolio investment is excluded from long-term capital, as is suggested by Branson (1973), the situation would not change significantly.

The net liquidity balance is in deficit, with the exception of n 2013. This deficit is mainly financed by short-term capital inflow. This inflow, as has already been pointed out, may mean a pressure on international reserves. Given that the Central Bank of Bos-

nia and Herzegovina functions as a currency board, the fall in international reserves means the fall in monetary base and money supply, which could later cause unemployment and recession in the country.

The official settlements balance from 2010 to 2012 is in deficit. However, this deficit, except in 2011, did not mean the fall in international reserves, but a rise due to loans from the International Monetary Fund. In 2013 and 2014, this balance is in surplus, so international reserves rose, in spite of repaying loans to the International Monetary Fund in 2013.

#### 4. Conclusion

The goal of the research described in this paper was to investigate the causes and ways of financing the deficit in Bosnia and Herzegovina's balance of payments. Hence, an analysis of disequilibrium measures in the balance of payments, for the past five-year period or, more precisely, from 2010 to 2014, was conducted. The analysis resulted in several conclusions.

First, the main cause of the deficit in Bosnia and Herzegovina's current account balance is the deficit in the merchandise trade balance. This deficit is so high that it cannot be annulled by the sum of surpluses in other components of the current account balance – the balance of services, the balance of primary income and the balance of secondary income.

Second, the deficit in the balance of goods is financed mainly by foreign direct investment, but also by other investment, i.e. debt instruments, because of which the country's external debt grows.

Third, in spite of net long-term capital inflows, the basic balance is in deficit. This is an unsustainable situation in the long run, because this deficit has to be financed by short-term capital inflows. Obviously, net long-term capital inflows are not sufficient to balance outflows based on the current account deficit, or more precisely, on the deficit in the balance of goods.

Fourth, in the first three years of the observed period, the net liquidity balance was in deficit, and later it was in surplus. This deficit is financed mainly by short-term liquid capital inflows, and these inflows are continued in 2013 and 2014. Certainly, short-term liquid capital may mean a pressure on international reserves. As a result, a fall in international reserves will mean a fall in the monetary base and money supply, and later it could cause unemployment and recession in the country.

Fifth, from 2010 to 2012, the official settlements balance was in deficit and in 2003 and 2014, it was in surplus. However, with the exception of 2011, this deficit did not cause, a fall in international reserves, because it was financed by loans from the International Monetary Fund.

Given that the balance of goods deficit was the main cause of Bosnia and Herzegovina's current account deficit, in order to solve this problem, the country has to stimulate exports of goods and reduce its import dependence. Simultaneously, the country needs to strengthen the balance of services surplus. In which sectors and how remains a topic for further research.

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#### (ENDNOTES)

- 1 Available from: <http://elibrary-data.imf.org>
- 2 On the alternative presentation see: IMF (2009).
- 3 In practice, however, it is not possible to comprise statistically all transactions of residents with abroad, so as a balancing item the net errors and omissions exist. See: Caves, E. R. et al. (2002).
- 4 On components of exceptional financing see: IMF (2009).
- 5 Let  $E$  = exports of goods,  $U$  = imports of goods,  $n$  = number of years; then:  
 $(1.0858)^n 4.490.23 = E = U = (1.0487)^n 9.981.79$ , so,  $n = 22,96$ .
- 6 NPISH – Nonprofit institution serving households.

Dražen Koški

## ANALIZA NERAVNOTEŽE U BILANCI PLAĆANJA: SLUČAJ BOSNE I HERCEGOVINE

### SAŽETAK

Mnogo je godina bilanca na tekućem računu Bosne i Hercegovine u deficitu. Cilj istraživanja ovoga rada bio je istražiti uzroke i izvore financiranja tog deficita. Provedena je analiza mjera neravnoteže u bilanci plaćanja za razdoblje od proteklih pet godina, preciznije od 2010. do 2014. Analiza je obuhvatila standardne mjere neravnoteže, ali i neke danas, ne tako često korištene mjere kao što su temeljna bilanca, bilanca neto likvidnosti i bilanca službenih podmirenja.

Uzrok deficita bilance na tekućem računu je deficit bilance roba koji je veći nego suma suficita bilance usluga, bilance primarnoga dohotka i bilance sekundarnoga dohotka. Taj deficit uvelike je financiran stranim izravnim investicijama, ali i dužničkim instrumentima po osnovi ostalih investicija zbog kojih raste in-ozemni dug zemlje.

S obzirom da je deficit bilance roba glavni uzrok deficita bilance na tekućem računu Bosne i Hercegovine, da bi se riješio ovaj problem, zemlja mora poticati izvoz roba i smanjiti uvoznost. Istodobno, zemlja treba jačati suficit u bilanci usluga.

**Ključne riječi:** bilanca plaćanja, temeljna bilanca, bilanca neto likvidnosti, bilanca službenih podmirenja, mjere neravnoteže

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**Dražen Novaković**  
*Josip Juraj Strossmayer University of Osijek*  
*Faculty of Economics in Osijek*  
*Gajev trg 7,*  
*31000 Osijek, Croatia*  
*dnovakov@efos.hr*  
*Phone: +385912244134*

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# **EVALUATION OF THE FINANCIAL PERFORMANCE OF PENSION FUNDS IN CROATIA**

## **ABSTRACT**

The aim of this paper is to evaluate the financial performance of pension funds in Croatia. Although there are other factors which are important in the pension funds overall performance, this paper focuses on investment accomplishments. The purpose of measuring portfolio performance is to determine whether portfolio managers add value compared to passive investment strategies. The traditional approach to pension funds' performance evaluation underlines standard measures of financial performance (e.g. ratios such as Sharpe's, Sortino's, Treynor's, etc.) which quantify the ability of pension fund managers to deliver an active management risk premium, with respect to benchmarks.

In this paper, the previously mentioned traditional measures of risk-adjusted performance are applied to Croatian pension funds. Due to recent changes in pension systems in other Eastern European countries once again emphasis is put on this issue in Croatia. The analysis furthermore includes evaluation of pension funds' asset allocation. The period of analysis covers twelve years, from the establishment of pension funds in Croatia in 2002 until 2013. The main hypothesis of the paper states that Croatian pension funds underperform with respect to benchmark comparisons, set as return on the combined CROBEX/CROBIS portfolio. Results show that the main hypothesis does not hold.

The financial performance of pension funds directly influences their competitiveness, derived from the possibility of measuring their success in active portfolio management. In addition, pension funds are expected to support the national economy. By investing their accumulating assets, they can protect jobs and enhance economic growth. However, they can achieve that only if they are competitive in means of financial performance.

**Keywords:** Pension funds, financial performance, competitiveness, Croatia

## 1. Introduction

The pension system is a very important part of every economy. In addition to the social role, it also has an important role in the functioning of the market economy. Given that the pension funds are large investors in the domestic economy, by investing their accumulating assets in different securities, they can protect jobs and enhance economic growth. However, they can achieve that only if they are competitive and successful in means of financial performance. Therefore, it is very interesting to analyze their financial performance.

The contribution of this research lies in the presentation of the financial performance of Croatian mandatory pension funds from the perspective of risk-adjusted measures, in an attempt to determine whether pension funds in Croatia could contribute to raising the competitiveness of the whole economy. This paper also has the intention of encouraging further exploration of the various measures of the pension funds' performance in Croatia, as well as studying the impact of various legal provisions regulating Croatian pension system on its performance. The author is the first, to the best of his knowledge, to analyze the risk-adjusted financial performance of Croatian mandatory pension funds.

Based on the data provided by HANFA (the Croatian Financial Services Supervisory Agency) and mandatory pension funds, an analysis of the risk-adjusted financial performance of Croatian pension funds has been done. Risk-adjusted measures including the Sharpe ratio, the Treynor ratio, the Sortino ratio and the information ratio were used. The analysis furthermore includes evaluation of pension funds' asset allocation. The period of analysis covers twelve years, from the establishment of pension funds in Croatia in 2002, until 2013. The main hypothesis of the paper states that Croatian pension funds underperform with respect to benchmark comparisons. Return on the combined CROBEX/CROBIS portfolio is set as a benchmark, as it reflects a large proportion of the current investment structure of Croatian mandatory pension funds. Results show that the main hypothesis does not hold.

The paper consists of seven chapters. After the introduction, there is a chapter on previous researches with an overview of the previous papers in Croatia and worldwide that are to some extent connected with this paper's topic. In the chapter

“discussion on appropriate benchmark”, numerous examples of benchmarks are presented in order to understand their strengths and weaknesses and to understand the selection of the benchmark in this paper. The chapter “discussion on competitiveness” theoretically discusses the influence of the pension funds' success on the competitiveness of the economy, which is one of the reasons for the analysis. The chapter “methodology and data” which includes an overview of the methods and data used, is followed by a chapter that deals with the empirical analysis itself and research findings. Finally, there is the conclusion in which the hypothesis is rejected by the results of the analysis and the causes of such results are tried to be explained.

## 2. Previous researches

Pension systems today have numerous challenges. According to Puljiz (2011), demographic changes, pressures for competitiveness on the globalized market, labor market transformation and citizen resistance to pension reforms are just some of them. Pension systems in post-socialist countries have experienced radical changes in the last two decades, largely driven by “neo-liberal orthodoxy” promoted by the World Bank. The pension contributors were offered to invest a portion of their contributions into private funded pension funds. Hungary and Poland reformed the mandatory pension insurance. Bejaković (2012) pointed out that this model greatly influenced Croatia and other countries in the implementation of their pension reforms. On the other hand, Czech and Slovenian pension systems have not undergone fundamental changes since the number of pensioners and the unemployed was growing relatively slowly, so only a voluntary pension scheme was introduced (Puljiz, 2011). Since 1998, Croatia has established a tripartite pension system that has been in effect since 2002. The system now consists of the mandatory pay-as-you-go subsystem (defined benefit scheme, first pillar) and the compulsory and voluntary market capitalization subsystems (defined contribution schemes, the second and third pillars) (Potočnjak, Vukorepa, 2012). However, Puljiz (2011) noted several examples of pension systems returning to the pre-reform situation. Slovakia has enabled the return of retirees from the second, market capitalized into the first public pillar. By legislative change, Hungary seized

the accumulated savings of the contributors, while Poland has shifted the long-term revenue from pension contributions, by reducing contributions to the second pillar. These measures are still not recommended as a way of crisis management. A better alternative to this kind of nationalization of pension savings is a reduction of contributions to the second pillar. Rudolph et al. (2010) argued that these actions appear to be primarily motivated by short-term fiscal considerations. Staňko (2003) in his study of the Polish pension system concluded that an investment in pension funds is worthless, at least at the present stage due to unsatisfactory returns, cost ineffectiveness, wrong measurement practices and lack of infrastructure.

Researches of pension funds are quite numerous, both globally and in Croatia, but in the Croatian case they are rarely considering performance measurement. Eror-Matić and Latković (2002) analyzed the performance of the biggest Croatian investment fund at that time, trying to understand investment operations of future pension funds. According to them, it is necessary to compare yields obtained with the risk level chosen, considering the given market portfolio or using various ratios like Sharpe's or Treynor's. Bakić (2002) analyzed the investment constraints of the pension funds, connected technical provisions and their appropriateness. Latković and Liker (2009) have calculated the fund's expected annual real return of 3.22% by using securities' returns in developed markets in the period from 1900 to 2008. As Croatian pension funds generally invest in riskier domestic assets, they adjusted the obtained values and considered a moderately conservative portfolio, suitable for the Croatian investment structure. On the other hand, Škember (2002) concluded that the pension model proposed by the World Bank is defective from the standpoint of social policy, and that is far from the certainty of strengthening economic growth. He believed that there was a certain dose of neoliberalism ideology in proclaiming these reforms which can neither protect the elderly, nor achieve faster economic growth. However, it does not dispute the serious difficulties that existing public pension systems are facing. Bahovec et al. (2011) explored the tendency in the movement of the concentration of total pension fund assets in Croatia and noticed a slight increasing trend of concentration. Bejaković (2012) stated that the average annual return of pension funds since their creation is 5.49%, which is

2.7% above inflation, but also more than the return set as the preferred when the pension reform began (2% above inflation). He also stated that Croatian pension funds returns are among the higher ones in the region and Europe. Thus, during 2010 the German pension funds achieved a return of 4-5%, the Austrian 6.6% and the Croatian 8.6%. However, the analysis is not complete without considering the investment structure. Thus, the Polish pension funds had a greater loss than the Croatian in 2008, although Poland was less affected by the crisis, due to significantly higher equity investment.

Ammann and Zingg (2008) investigated the performance of Swiss pension funds and investment foundations over the period of 1996 to 2006. Swiss pension funds follow a more active approach but it seems useless as the risk-adjusted performance is much better for the more passively managed investment foundations. Clare et al. (2009) also argued in favor of passive investment vehicles after analyzing performance of the pooled pension funds in the UK. Similar results for larger funds were obtained by Andonov et al. (2012). They analyzed active management components (asset allocation, market timing and security selection) in the risk-adjusted net performance of U.S. pension funds. Blake et al. (2009) studied decentralization in UK pension funds' investment management from 1984 to 2004. Over this time period, most pension funds shifted from balanced to specialist managers and from a single to competing multiple managers within each asset class. Schwaiger et al. (2009) examined the performance of alternative decision models for pension funds and used the Sortino and the Solvency ratio to measure their performance over time. Walker and Iglesias (2010) used monthly data to calculate the Sharpe ratio for the pension funds on a sample of 11 countries. Performance is calculated against four proxies for the risk-free rate: a short-term local rate, a local long-term rate, a short-term U.S. Treasury bills rate, and the annual return on long-term U.S. Treasury bonds. Rudolph et al. (2010) concluded that long-term profitability of equity investments is not derived from the instruments themselves, but from a well-diversified portfolio at the international level. Therefore, significant investing in domestic equity markets is risky for pension funds due to country risk.

### 3. Discussion on appropriate benchmark

After strong turbulences hit the global capital markets and the Zagreb Stock Exchange in 2008, the issue of pension contributors protection against the risks associated with pension funds' investments has become even more important (Potočnjak, Vukorepa, 2008). Investment rules are designed to limit the risk of a portfolio, but they do not guarantee achieving positive returns. This is why lifecycle portfolio modeling methods have been globally developing, based on the age of retirement. An individual's ability to withstand investment risks varies indeed with his age (Potočnjak, Vukorepa, 2012). This system was introduced in Croatia at the time of writing this paper.

Pension funds comparison and setting benchmarks for measuring success are problematic issues. Potočnjak and Vukorepa (2012) stated that due to major practical differences in investment strategy and the long-term character of investments, classic comparison of performance among the funds on an annual basis is not appropriate. Walker and Iglesias (2010) also counseled against international comparisons of traditional performance measures. Potočnjak and Vukorepa (2012) proposed the introduction of complex criteria for assessing the performance of each fund. The alternative is introducing investment performance measurement with respect to the risk degree. The main objective of pension funds' performance measurement is to ascertain whether fund managers added value compared to the passive strategy presented by a specific benchmark. If the Efficient Markets Hypothesis is taken into account, it can be assumed that the active fund management gives results very similar to the benchmark because it is not easy to beat the market (Walker, Iglesias, 2010). On the other hand, Latković and Liker (2009) argued that if the fund does not yield higher returns than those achieved by the passive portfolio (benchmark), for the amount of management fees, then the collective investment scheme is worthless for contributors.

Benchmarks used for evaluation of the risk-adjusted performance are various. The two main types of benchmarks used in the UK are external asset-class benchmarks and peer-group benchmarks (median return). When it was widely recognized that the objectives of different pension funds differ widely, customized benchmarks of external type became more common. The US has similar benchmarks as

the UK. Benchmarking is usually done on an asset class basis against well-known total return indexes. Thus the performance is assessed relative to the S&P 500 total return index, the Lehman Aggregate Index (now the Barclays Capital Aggregate Bond Index), etc. (Blake, Timmermann, 2002). However, the popularity of S&P 500 as a large cap benchmark has significantly declined from 50% of large cap funds in 1996 to only 26% in 2006. Instead, funds are increasingly using the Russell 1000, Russell 3000 and Wilshire 5000. The Russell 2000 is the dominant small cap benchmark (Bauer et al., 2010). The other kind of benchmarking is relative to the average within a peer group. Other countries tend to use fixed or bond-based benchmarks. In Japan, the annual rate of return from the Treasury bond, with maturity in excess of 10 years, plus 0.1% is used. In Italy, a combination of well-known indices like JPM bond and MSCI stocks is used in varying proportions. The benchmark in Chile is the average of the return of the other pension funds (AFPs). The use of market indices has been rejected because the local market benchmarks are of questionable applicability (Blake, Timmermann, 2002). Staňko (2003) notes that the Polish system of performance measurement is similar to the Latin American. The results of pension managers are compared to the industry's average return (AR) calculated every three months as an arithmetic average of individual funds weighted by their market shares during the period (a peer-group index).

When it comes to the limitations on investment, especially outside the domestic market, with a hedging purpose, Potočnjak and Vukorepa (2008) point out that limitations encourage similar behavior of pension funds in terms of investment (investment herding), which consequently leads to similarities in the return level and possible losses. Blake and Timmermann (2002) agree by stating that "in effect, a target that uses a group's median will create an outcome very close to this median." Not knowing what the median fund manager result will be at the end of the period makes managers stick to one another so as not to deviate from the final result. That is why the results are not much higher than those obtained from passive investment strategies. This is also a reason why an external benchmark should be used. Finally, Staňko (2003) notes that "the guarantees of the minimal rate facility are illusionary as it is the client, after all, onto whom the cost will be passed in the long run." It is interesting that in 2002, when the

reference rate for pension funds in Croatia was not yet defined, Bakić (2002) warned that if a weighted average yield of pension funds were to be chosen, with weights proportionate to the size of the funds, it would lead to the herd effect, which causes inefficient allocation of resources for all funds. Twelve years after this note, the Croatian pension funds' performance shows the herd effect as reference rate has been wrongly defined. Blake and Timmermann (2002) conclude that "performance benchmarks are important for three key reasons: they help to measure the investment performance of institutional fund managers, they provide clients with a reference point for monitoring that performance, and they can also have the effect of modifying the behavior of fund managers. A good benchmark would be one that did not have built-in biases either in favor of or against particular asset classes. A good benchmark might therefore be based on a multiple of indices that covers all the key asset categories."

### 4. Discussion on competitiveness

Some governments argue that competition among pension funds helps to optimize individual retirement plans. Fund managers would compete for available funds and contributors would choose a pension fund whose investments match their risk aversion. This competition disadvantages pension funds that cannot show good short-term returns in comparison to those competitors that can, simply by investing in short-term deposits. Such a situation creates a bias against investing in long-term instruments that cannot provide an immediate return, which is a significant problem as pension funds should be long-term oriented. In addition, in order for the system to function in practice, the contributors should be able to assess the funds' performance which is not common. The information is often inaccessible and incomprehensible for the majority of contributors (Rudolph et al., 2010). Investment restrictions, the prudent person rule and the different forms of asset protection in mandatory capital-funded pension schemes from the negative or insufficient return (like relative return guarantee) aim at increasing pension contributors' security due to the return risk. As responsibility is shifted to the individual, his awareness of the benefits and risks of the capital-funded pension system is extremely important and, according to Potočnjak and Vukorepa

(2008), it is the state's responsibility to provide him with such information. Furthermore, although various investment restrictions do not encourage competition, they are of high importance. The question of the prohibition for Croatian pension funds to invest in real estate was very interesting considering the tourism development of the country. However, after a sharp drop in real estate prices due to the 2008 crisis, it was obviously an extremely wise idea. Potočnjak and Vukorepa (2008) conclude that considering the second pillar of the pension system only from the standpoint of its contribution to the development of financial markets and economic growth is unacceptable. The approach that emphasizes the importance of this system for social security in old age is at least of the same importance.

When it comes to future investments of pension funds, pension companies want to invest in profitable and secure new development projects in Croatia. Creative ideas are the most important while possible technical adjustment of legislation should not be a problem. Pension companies are aware of the need for redefinition of pension fund investments in the Croatian economy as it is a very important issue for the further development of the pension system. Pension companies are willing to participate in future large infrastructure projects if the risk-return ratio is acceptable. Pension companies are interested in the future privatizations and other ownership transformation forms (especially the recapitalization) and wish to continue engaging in corporate governance (UMFO, 2011). Considering the large funds available for their further investments, mandatory pension funds are definitely a natural partner for Croatian companies as a significant source of new equity.

### 5. Methodology and data

The performance of any fund can be measured using different measures. Among the most used ones are the Sharpe ratio, the Sortino ratio, the information ratio and the Treynor ratio. These risk-adjusted performance measures are used by fund managers to rank and compare their portfolio performance with other managers (Schwaiger et al., 2009). All methods used in this paper are based on the papers by Schwaiger et al. (2009) and Tonks (2006), with some adjustments for the purposes of this paper.

In order to assess the portfolio returns, Sharpe proposed computing the following ex post ratio for the portfolio under consideration and also for the benchmark portfolio, to enable comparison

$$S_H \equiv \frac{\bar{D}}{\sigma_D} \tag{1}$$

$$\bar{D} \equiv \frac{1}{T} \sum_{t=1}^T D_t \tag{2}$$

$$D_t \equiv R_{Pt} - R_{It} \tag{3}$$

$$\sigma_D \equiv \sqrt{\frac{\sum_{t=1}^T (D_t - \bar{D})^2}{T}} \tag{4}$$

where  $R_{Pt}$  is the return on the portfolio,  $R_{It}$  is the risk-free rate, and  $\sigma_D$  is the standard deviation of the excess returns of the portfolio. The Sharpe ratio actually measures the excess return per unit of risk (variability) of the investment. If the benchmark is the same, investments with higher Sharpe ratios are the better ones.

The Treynor ratio measures the returns earned in excess of which could be earned on a riskless investment, compared to the portfolio beta. The Treynor ratio T is given by

$$T = \frac{(r_p - r_f)}{\beta_n} \tag{5}$$

$$\beta = \frac{Cov(R_P, R_M)}{Var(R_M)} = \frac{\sum(x - \bar{x})(y - \bar{y})}{\sum(x - \bar{x})^2} \tag{6}$$

where  $r_p$  is the portfolio return,  $r_f$  is the risk free rate and  $\beta$  is the beta of the portfolio. Again to assess the performance of the portfolio, T is computed for both the portfolio and the benchmark. A higher Treynor ratio means better performance of the fund strategy. Both the Sharpe and Treynor ratios are based on the capital asset pricing model (CAPM) (Schwaiger et al., 2009).

The information ratio is similar to the Sharpe ratio but compares the performance of the portfolio to its benchmark

$$I = \frac{(r_p - r_b)}{\sigma_{ER}} \tag{7}$$

where  $r_p$  is the average return for the portfolio p over some period,  $r_b$  is the average return on the benchmark portfolio over the same period, so that  $(r_p - r_b)$  is the excess return on the portfolio over the benchmark;  $\sigma_{ER}$  is called the tracking error, and is the standard deviation of the excess returns during the period. The information ratio compares the return over the benchmark with the 'risk' taken where risk is the deviation from the benchmark (Tonks, 2006). The standard deviation can be calculated in the following way

$$\sigma = \sqrt{\frac{1}{N} \sum_{i=1}^N (x_i - \bar{x})^2} \tag{8}$$

where  $\bar{x}$  is the mean of returns and N is the number of observations.

The Sortino ratio is widely used in industry since it only penalizes a portfolio's underperformance via the downside deviation. The Sortino ratio is calculated by

$$S \equiv \frac{R_p - R_f}{\sigma_d} \tag{9}$$

where  $R_p$  is the return on the portfolio,  $R_f$  is the risk-free rate and  $\sigma_d$  is the standard deviation of the negative returns on the portfolio.

The dataset used in this paper consists of monthly values of mandatory pension funds' units of account. These values represent the basis for calculating mandatory pension funds yields, as discussed in the previous chapter. Data for all four existing mandatory pension funds in Croatia was collected for the period since they were founded in April 2002 up to June 2014. The dataset primarily consists of official data published by HANFA (the Croatian Financial Services Supervisory Agency). However, one smaller part of the data was provided by the mandatory pension funds themselves as HANFA does not provide data for the period before it was es-

tablished in 2005. Data for CROBEX and CROBIS, the Croatian equity and bond index respectively, is taken from the Zagreb Stock Exchange. The source of monthly inflation data is the Croatian National Bank and data on the risk-free rate is provided by the Croatian Ministry of Finance.

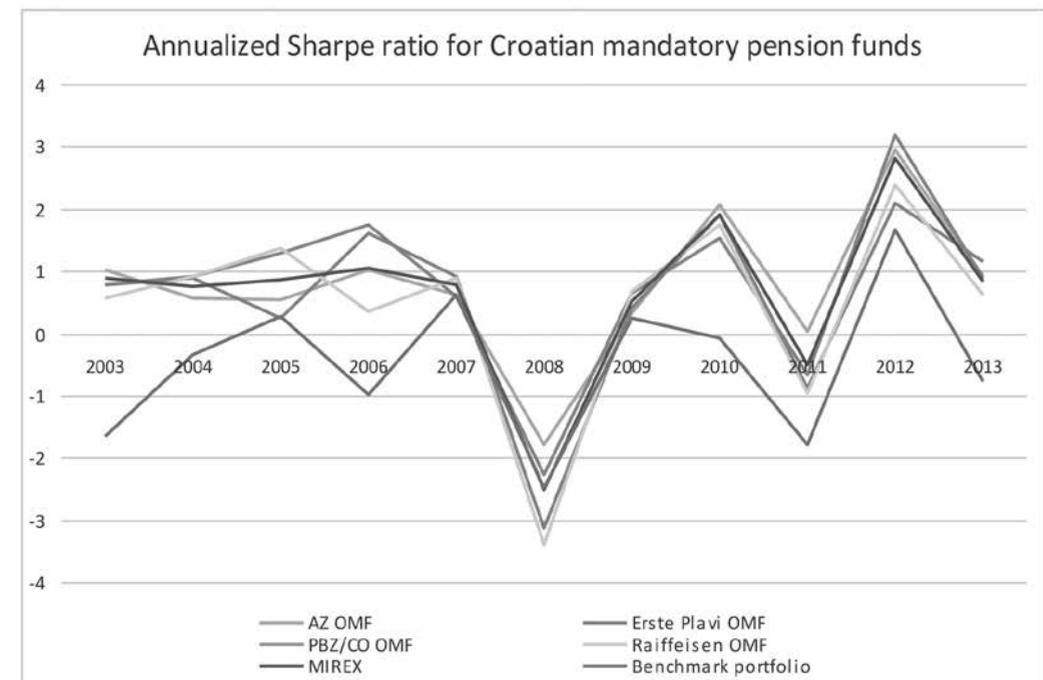
When it comes to pension funds' asset allocation data, it is also published by HANFA. The pension funds' investment portfolios are allocated across several asset classes: domestic shares and GDRs, domestic government bonds, domestic corporate and municipal bonds, domestic open-end and closed-end funds, domestic short-term securities, domestic deposits, foreign shares, foreign government bonds, foreign corporate and municipal bonds, foreign open-end and closed-end funds, and other.

According to HANFA, the rate of return is the difference between the values of the unit of account on the last day of the reporting period and the last day of the previous period, expressed as a percentage. The reference rate of return is defined as a weighted arithmetic mean of all mandatory pension funds average rates of return in previous three calendar years, reduced by two percentage points. MIREX represents the value of the unit of account of an average OMF, and is calculated as a weighted arithmetic mean. The weight represents OMFs' share of total net assets.

### 6. Empirical analysis and results

The analysis was conducted on the basis of monthly values of mandatory pension funds' units of account. Through them, the monthly funds' returns are calculated, as described in the previous section. But before applying risk-adjusted measurements, the monthly returns are adjusted for inflation, and depending on the particular calculation, for the risk-free interest rate.

Figure 1 Annualized Sharpe ratios for Croatian mandatory pension funds from 2003 to 2013



Source: HANFA, mandatory pension funds; author's calculations

The risk-free interest rate is presented by a return on 91-day Croatian T-bills. Certain calculations also required establishing a benchmark. After detailed analysis of the various benchmarks, set out in a separate chapter, the author has chosen the return on the combined portfolio comprised of Croatian equity and bond indexes - CROBEX and CROBIS - to be a benchmark. The weights of each of the indexes in the portfolio are based on an analysis of the equity and bond instruments' proportions in the pension funds' portfolios for each year under consideration.

Concerning the analysis results, the risk-adjusted performance of Croatian mandatory pension funds is surprisingly positive. Focusing on the Sharpe ratio shown in Figure 1, calculated for each year in order to take into account the differences in the portfolio structure over the years, it can be seen that all pension funds significantly outperformed the benchmark results. Only in 2008, during the crisis, the Sharpe ratio of the benchmark is around the pension funds' average. In addition, it is interesting that the Sharpe ratio of all funds is about 1 on average, which can be described as a good performance. However, in 2012 it was above 2, for one fund even above 3, which is considered as a very good and excellent result, respectively.

The data in Figure 1 (and in Table 2 in the appendix) shows also the apparent presence of the herd effect, which has previously been discussed. The Sharpe ratios of all funds are similar because funds are trying not to be worse than MIREX (a weighted average of all funds). Such a state causes considerable loss in funds' competitiveness, both at the level of their struggle for new contributors, and at the level of the overall pension system success as it is completely irrelevant in which fund one invests - all funds give nearly the same results.

**Table 1 Information ratio, Treynor ratio and Sortino ratio for Croatian mandatory pension funds for analyzed period**

	AZ OMF	Erste Plavi OMF	PBZ/CO OMF	Raiffeisen OMF	MIREX	Benchmark portfolio
Information ratio	0.330679	0.361446	0.28742	0.316293	0.33369	-
Treynor ratio	0.004488	0.003395	0.00261	0.004261	0.00392	-0.00189
Sortino ratio	0.218066	0.158211	0.12286	0.218239	0.19258	-0.13701

Source: HANFA, mandatory pension funds; author's calculations

Similar trends can be observed also from the data in Table 1. In fact, when one looks at the funds' information ratio for the entire period, it is evident that the funds' results were moving in a narrow range - from 0.28 to 0.36 units of return above the benchmark per every unit of risk taken (standard deviation of these returns). This is graphically visible on Figure 2 in the appendix.

Additional evidence of pension funds' outperformance compared to the benchmark are levels of the Treynor and Sortino ratios, also shown in Table 1. In case of the Sortino ratio, compared to the Sharpe ratio, only one ratio is calculated for the entire period. The reason is the fact that the Sortino ratio considers only the negative returns in the calculation of standard deviation. As negative returns are very unevenly distributed throughout the analyzed years, calculating the ratios for each year would not provide a reasonable basis for comparison. Therefore, only one Sortino ratio for the entire period was calculated. The average equity and bond instruments' proportions in pension funds' investments for the whole period under consideration were taken as CROBEX and CROBIS weights in the benchmark portfolio. The Treynor ratio is also calculated for the entire period, but for practical reasons. The Sortino ratios of the least successful fund PBZ/CO OMF and of the benchmark, 0.12 compared to -0.13, show this significant outperformance of pension funds. However, both the Treynor and Sortino ratios also show presence of the herd effect.

Finally, before drawing conclusions, it is necessary to focus on the analysis of mandatory pension funds (OMF) total assets investment structure in years under consideration. Based on this analysis, a calculation of the weights for the benchmark portfolio was made. The data in Figure 3 and Figure 4 in the appendix shows that the proportion of investment in domestic bonds is by far the largest - from 67.95% in 2003 to 63.43% in 2013. The total investment in shares is much lower - from less than 6% in 2003

up to 21.5% in 2013. Other investments count for a small proportion too, but their impact on performance should not be underestimated.

## 7. Conclusion

The aim of this paper was to evaluate the financial performance of pension funds in Croatia. As Croatian mandatory pension funds outperform the customized external benchmark, set as a return on the combined portfolio of CROBEX and CROBIS, the main hypothesis of this paper does not hold. Their risk-adjusted performance results, measured by the Sharpe, Treynor, information and Sortino ratios, are more than satisfactory. Since the benchmark largely reflected the funds' investment structure, these results are really surprising. As an explanation, two alternatives could be offered. Specifically, as the benchmark does not fully reflect the structure of pension funds' investments, it is possible that the actual return on the rest of the portfolio is responsible for the difference in performance. On the other hand, it is possible that it is all about the accounting practices. Specifically, CROBEX and CROBIS

are market indexes, which means that they reflect changes in the market in line with the mark-to-market rule. On the other hand, pension funds might not use the mark-to-market rule for their portfolio in the same sense due to various accounting policies. It is obvious that further research, perhaps in collaboration with pension fund administrators, is needed to find solutions for these issues. In addition, although international comparisons are not recommended, more research might result in some adequate international benchmark. It might enable a proper international comparison of pension funds - something this paper unfortunately was not able to deliver. Finally, this paper also attempted to determine whether pension funds in Croatia could contribute to raising the competitiveness of the whole economy. Considering their positive financial performance, their wish to participate in future development projects in Croatia and their 8,3 billion EUR assets, they are certainly a great potential for economic growth. However, they have to be careful in investment strategy as the social security of pensioners is at least as important as contributing to the economic growth and capital markets development.

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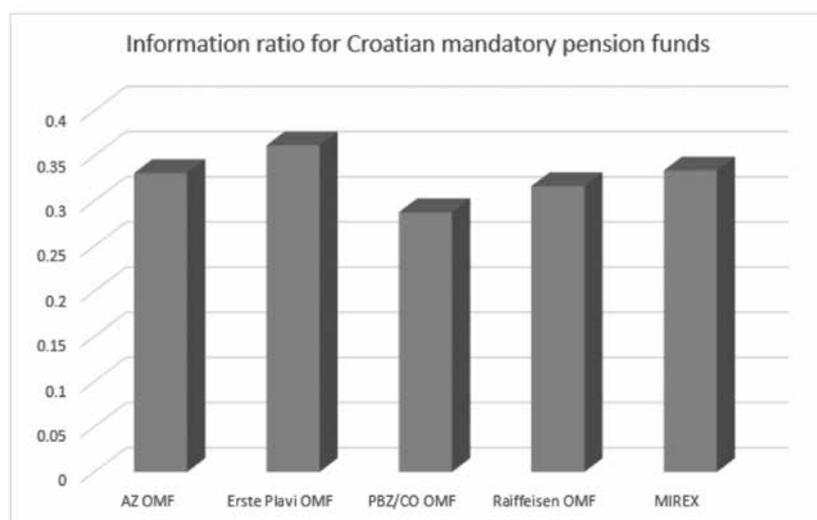
Appendix

Table 2 Annualized Sharpe ratios for Croatian mandatory pension funds from 2003 to 2013

	AZ OMF	Erste Plavi OMF	PBZ/CO OMF	Raiffeisen OMF	MIREX	Benchmark portfolio
2003	1.043373	0.802276	0.786222	0.562581	0.889356	-1.64316
2004	0.570308	0.926131	0.901749	0.921976	0.772389	-0.32654
2005	0.539934	1.284416	0.251035	1.371771	0.882139	0.27924
2006	1.034214	1.742093	1.616341	0.366436	1.063813	-0.98005
2007	0.641632	0.613758	0.920071	0.894874	0.793041	0.64205
2008	-1.786646	-2.248409	-3.104145	-3.387013	-2.500867	-2.47351
2009	0.324879	0.645273	0.420628	0.692644	0.513113	0.26473
2010	2.064022	1.542038	1.905858	1.765322	1.918561	-0.06346
2011	0.026945	-0.650376	-0.861728	-0.9414703	-0.501541	-1.76932
2012	2.944969	3.204869	2.100845	2.403713	2.825592	1.67192
2013	0.920157	0.898974	1.157776	0.626488	0.843322	-0.76615

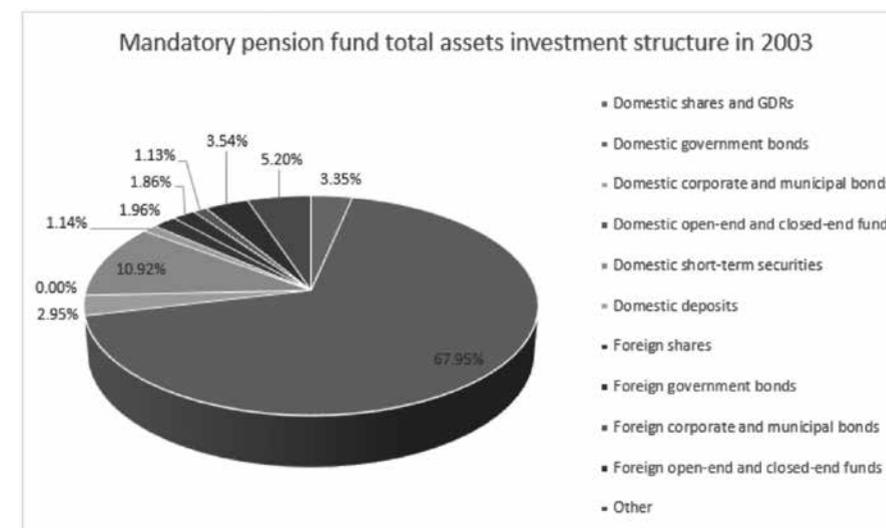
Source: HANFA, mandatory pension funds; author's calculations

Figure 2 Information ratio for Croatian mandatory pension funds for the analyzed period



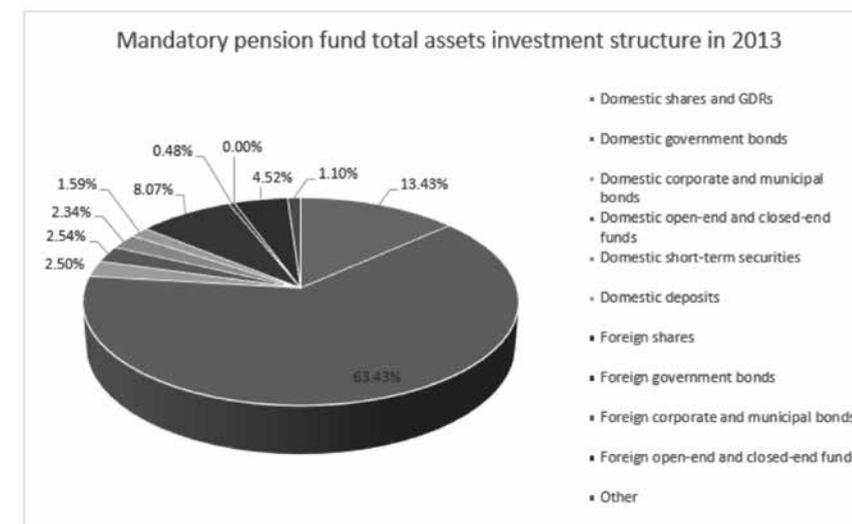
Source: HANFA, mandatory pension funds; author's calculations

Figure 3 Mandatory pension funds total assets investment structure in 2003 (at the end of the period, in %)



Source: HANFA, mandatory pension funds; author's calculations

Figure 4 Mandatory pension funds total assets investment structure in 2013 (at the end of the period, in %)



Source: HANFA, mandatory pension funds; author's calculations

Dražen Novaković

## EVALUACIJA FINANCIJSKE USPJEŠNOSTI MIROVINSKIH FONDOVA U HRVATSKOJ

### SAŽETAK

Cilj je ovog rada ocijeniti financijsku uspješnost mirovinskih fondova u Hrvatskoj. Iako postoje i drugi čimbenici koji su važni za ukupnu uspješnost mirovinskih fondova, ovaj je rad okrenut investicijskoj uspješnosti. Općenito govoreći, svrha mjerenja uspješnosti portfelja jest utvrditi dodaju li menadžeri portfelja vrijednost u odnosu na pasivne investicijske strategije. Tradicionalni pristup ocjenjivanju uspješnosti mirovinskih fondova naglašava standardne mjere financijske uspješnosti (npr. omjere poput Sharpe-a, Sortino-a, Treynor-a itd.). Ova mjerila kvantificiraju sposobnost menadžera mirovinskih fondova da ostvare premije rizika za aktivni menadžment, s obzirom na određenu referentnu vrijednost.

U ovome radu, prethodno spomenute tradicionalne mjere uspješnosti prilagodene za rizik primjenjuju se na hrvatskim mirovinskim fondovima. Nedavne promjene u mirovinskim sustavima drugih istočnoeuropskih zemalja i zemalja u razvoju stavljaju naglasak još jednom na ovo pitanje i u Hrvatskoj. Analiza nadalje uključuje evaluaciju ulagačke strukture mirovinskih fondova. Promatrano razdoblje obuhvaća dvanaest godina, od osnivanja mirovinskih fondova u Republici Hrvatskoj 2002. godine do 2013. godine. Glavna hipoteza rada navodi da hrvatski mirovinski fondovi podbacuju u odnosu na referentnu vrijednost, postavljenu kao povrat na portfelj sastavljen od indeksa CROBEX i CROBIS. Rezultati odbacuju glavnu hipotezu.

Financijsko poslovanje mirovinskih fondova izravno utječe na njihovu konkurentnost, proizlazeći iz mogućnosti mjerenja njihovoga uspjeha u aktivnom upravljanju portfeljem. Osim toga, od mirovinskih fondova se očekuje da će podržati nacionalno gospodarstvo. Ulaganjem svoje rastuće imovine u različite vrijednosne papire, oni mogu zaštititi radna mjesta i poduprijeti gospodarski rast i na lokalnoj i na regionalnoj razini. Međutim, to mogu postići samo ako su konkurentni i uspješni u smislu financijske uspješnosti.

**Ključne riječi:** mirovinski fondovi, financijska uspješnost, konkurentnost, Hrvatska

Martina Harc  
Croatian Academy of Sciences and Arts  
Institute for Scientific Research and  
Artistic Work in Osijek  
Franje Kuhača 29,  
31000 Osijek, Croatia  
harc@hazu.hr  
Phone: +38531214928

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## THE RELATIONSHIP BETWEEN TANGIBLE ASSETS AND CAPITAL STRUCTURE OF SMALL AND MEDIUM-SIZED COMPANIES IN CROATIA

### ABSTRACT

The asset structure of companies should matter for financing decisions. Small and medium-sized companies in Croatia may use tangible assets as collateral, either providing more access to creditors or as a guarantee in case of bankruptcy. The aim of this paper is to investigate the relationship between tangible assets and the capital structure of Croatian small and medium-sized enterprises. Most previous studies have shown various relationships between tangible assets and leverage. This study has been conducted on a sample of 500 Croatian SMEs for the period between 2005 and 2010. The data used for the empirical analysis were taken from companies' annual reports. The Pearson Correlation Coefficient is applied in order to examine the relationship between tangible assets and leverage measures. The results of this research indicate that tangible assets are differently correlated with short-term and long-term leverage. The relationship between tangible assets and short-term leverage is negative and statistically significant in all observed years. The relationship between tangible assets and long-term leverage is positive in all observed years and statistically significant. The results show that small and medium-sized companies use their collateral to attract long-term debt, which means that small and medium-sized companies use lower costs and the interest rate of long-term debt in relation to short-term debt. These findings correspond with the maturity matching principle, according to which long-term assets are financed with long-term financing and short-term assets are financed with short-term funds. These results suggest that tangible assets have a positive impact on the long-term debt of Croatian SMEs because tangible assets constitute a positive signal to the financial institutions, which can request the selling of these assets in case of bankruptcy. These findings are consistent with the trade-off theory which predicts a positive relation between leverage and tangibility, but also with the pecking order theory, which is generally interpreted as predicting a negative relation between leverage and tangibility.

**Keywords:** Tangible assets, capital structure, leverage, small and medium-sized enterprises

## 1. Introduction

Capital structure choice is one of the most important decisions faced by firm management (Degryse et al., 2010). Capital structure refers to the way a firm is financing its assets through a combination of equity and debt (Titman and Wessels, 1988). The process of financing takes a very important place in firm management because it must ensure financial continuity necessary for growth and maintaining competitiveness in their environment. This is especially evident in transition economies, where due to underdeveloped capital markets debt remains the main source of financing. Capital structure can be defined as a mixture of a firm's capital with debt and equity. The form of financing and types of funding sources will define a firm's capital structure.

Capital structure theories offer a number of determinants that are responsible for various impacts on capital structure, while the empirical literature tends to find evidence that firms behave in accordance with the theoretical predictions (Shamshur, 2010). Mostly they focus on those determinants which are more likely to have a major role on leverage decisions. Although there have been various studies analysing capital structure, it is still debated what the determinants of capital structure are and how they impact capital structure decisions. Since Modigliani and Miller published their seminal paper in 1958, the issue of capital structure has generated great interest among researchers. From the theoretical point of view, existing empirical studies widely used two models of capital structure: the trade-off theory and the pecking order theory. The trade-off theory implies that a company's capital structure decisions involve a trade-off between the tax benefits of debt financing and the costs of financial distress. The pecking order theory points out that there is a certain order in financing, starting from retained earnings as a primary source of internal financing, then moving to debt and using equity only as the last resort. Each of these theories suggests how certain determinants affect capital structure. According to theories, researchers found various impacts of determinants on capital structure depending on the country they are analysing.

In this paper the focus is on one determinant: tangible assets. Why tangible assets? Firstly, because the asset structure of companies should matter for financing decisions. Small and medium-sized com-

panies in Croatia may use tangible assets as collateral, either providing more access to the creditor or as a guarantee in case of bankruptcy. Olakunle and Oni (2014) pointed that tangibility of assets is characterized by the effect of the collateral values of assets on a firm's leverage level. Secondly, the type of assets that a firm possesses can be considered as an ambiguous factor in the determination of the debt-equity ratio. The cost of financial distress depends of the types of assets that a firm has. If a firm retains large investments in land, equipment and other tangible assets, it will have smaller costs of financial distress than firms that rely on intangible assets (Daskalakis and Psillaki, 2008). Thirdly, tangible assets are relatively easy to identify in contrast to intangible assets, which are more difficult to identify, separate, utilize, account or imitate. It is important to see whether tangible assets are in function of debt or not, and whether the hypotheses support the pecking order theory or the trade-off theory.

This paper adds to the existing literature by examining the relationship between tangible assets and the capital structure of small and medium-sized enterprises (SMEs). These enterprises represent important parts of all economies in terms of both their total number and their job offer and job creation. One of the major topics that has been analysed in previous studies is how SMEs finance themselves. Financing is an essential part of operating any business. Without adequate access to financing potential the growth of a firm is jeopardized. In reality, obtaining finance and other banking services has never been easy for small and medium-sized enterprises. According to Degryse et al. (2010), large companies are more aware of better financing methods, since they employ more financial and administrative staff and may have a stronger bargaining position towards lenders. Croatia is a country in transition and a new member of the European Union, and as such it is an interesting case study. In a country like Croatia the private equity market is poor and the financial system is bank-based, so the role of debt is fundamental. It is important to analyse whether there is a positive or negative correlation between the capital structure and tangible assets of Croatian small and medium-sized enterprises.

According to the existing empirical studies and results of the researches, the research hypotheses of this paper are formed as follows. The first hy-

pothesis is: tangible assets are positively related to leverage and the trade-off theory predicts a positive relation between leverage and tangibility. This relationship exists because tangible assets are easier to collateralize and they suffer a smaller loss of value when firms go into distress. Since firms tend to match the maturity of assets with maturity of liabilities, tangibility should be positively related with leverage (Koksal et al., 2013). Degryse et al. (2010) argues that the positive effect on total debt comes entirely from long-term debt, so an additional hypothesis is that tangible assets are positively related to long-term leverage. The second hypothesis is: tangible assets are negatively related to leverage, i.e. the negative relationship between leverage and asset structure indicates that firms that employ lots of tangible assets seem to rely more on internal funds generated from these assets, which is predicted by the pecking order theory. Based on the discussion above, Bas et al. (2009) and Degryse et al. (2010) argue that short-term debt is negatively related with asset tangibility. According to them, the second additional hypothesis is: tangible assets are negatively related to short-term leverage.

This article is organized as follows: Section 2 reviews the relevant theoretical and empirical literatures on how tangible assets influence capital structure. Section 3 presents a description of the methodology that includes a description of data and variables, and methods applied in the research. Sections 4 and 5 present the results, discussion and conclusions.

## 2. Literature review and previous studies

According to recent papers, although there is no consensus among authors on the direction of the relationship, asset structure plays an important role in determining the capital structure (Ellili and Farouk, 2011). Harris and Raviv (1991) argue that the larger share of tangible assets increases the liquidation value of a company. This is due to the fact that the tangible assets constitute collateral for the debt in case of bankruptcy. Morellec (2001) argues that when a firm is solvent, asset sales increase the firm value by allocating assets to better uses. He also argues that when the firm is in distress, asset sales represent the cheapest source of funds for the firm. Moreover, asset sales allow the firm to finance continued operation of its remaining assets without requiring external capital. Sanyal and Mann (2010)

examined the financial structure of start-up firms. They found that start-ups with more tangible assets as potential collateral are more likely to use external debt in the financial structure, since these assets have a high liquidation value. As the authors above concluded, collateral value of assets was found to be an important determinant in capital structure. Recent papers confirmed either a negative or positive relation between tangibility and capital structure. Koksal et al. (2013) investigated the factors that determine the capital structure choices in Turkey. They used tangibility as a proxy for the type of assets. They found that tangibility appears to be the key determinant of long-term leverage (positive relationship), but is not important for short-term leverage (negative relationship). Their empirical findings suggested that the trade-off theory is a better description of the capital structure of Turkish firms than the pecking order theory. In their study, Daskalakis and Thanou (2010) investigated determinants of capital structure of Greek SMEs in the period between 2003 and 2007. They found that the firms' debt ratio is negatively related to asset structure. They concluded that firms that generate relatively high internal funds tend to avoid debt financing. Thus, firms that rely more on tangible assets tend to use less debt than firms with relatively fewer tangible assets. Psillaki and Daskalakis (2008) investigated the capital structure of Greek, French, Italian and Portuguese small and medium-sized enterprises. They argue that the costs of financial distress depend on the types of assets that a firm employs. If a firm retains large investments in land, equipment and other tangible assets, it will have smaller costs of financial distress than a firm that relies on intangible assets. Thus, firms with more tangible assets should issue more debt. On the other hand, large holdings of tangible assets may imply that a firm has already a stable source of return, which provides more internally generated funds and discourages it from turning to external financing. So, the negative relationship between leverage and asset structure indicates that firms employ lots of tangible assets and seem to rely more on internal funds generated from these assets, which is predicted by the pecking order theory. They found that asset structure is significant and negatively correlated with leverage. A possible explanation is that firms with lots of tangible assets may have already found a stable source of return, which provides them more internally generated funds and discourages them from turning to external financing. Campello and Giambina (2011)

examined the relation between corporate asset structure and capital structure by exploiting variation in the salability of tangible assets. They argued that tangible assets are often illiquid, so they show that redeployability of tangible assets is the main determinant of corporate leverage for firms that are more likely to face credit frictions, especially during periods of tight credit. Their evidence shows that tangible assets drive capital structure to the extent that they are redeployable. Only the component of asset tangibility that responds to salability has explanatory power over firm leverage. They found that the relation between redeployability and leverage is important and pronounced in firms for which the collateral resource is particularly important in the borrowing process. For large firms, in contrast, redeployability is an irrelevant driver for leverage. La Rocca et al. (2009) examined the strategic financing choices of small businesses through the lens of the business life cycle. They conclude that tangibility has a positive relationship with debt, but its intensity varied across a firm's life cycle. Their research shows that young firms have less-tangible assets in the form of stock, which makes them more reliant on collateral assets to secure debt and obtain credit under better terms. In the growing and mature stages of a firm's life cycle, this effect decreases, but is still relevant. Degryse et al. (2010) expected asset tangibility to be positively correlated with debt as it provides collateral. They found strong support concerning the positive relationship between total debt and collateral. The positive effect on total debt came entirely from long-term debt, as short-term debt is negatively affected by the collateral. Since the collateral is a way to reduce risk of SMEs, these firms can fully use their collateral to attract long-term debt. For the firm, the costs of long-term debt are lower because banks charge relatively higher interest rates on short-term loans. These findings are in accordance with the maturity matching principle that long-term assets are financed with long-term financing and short-term assets are financed with short-term funds. Bas et al. (2009) studied the determinants of capital structure decisions of small and private firms in 25 developing countries from five different regions. They confirmed the importance of firm level factors in accordance with the capital structure theory. Based on the maturity matching principle, long-term debt is financed by long-term assets, implying that as asset tangibility increases, firms borrow more long-term debt, while short-term debt is negatively related with asset tangibility. Leverage is negatively related with asset

tangibility because firms in their sample had more short-term debt than long-term debt, suggesting that small firms with more collateral borrow less short-term debt, but their results showed that medium firms with more collateral also borrow less. Heyman et al. (2007) examined the determinants of debt-equity choice and the debt maturity choice for a sample of small, privately held firms in the creditor oriented environment of Belgium. They hypothesized a positive relation between the proportion of tangible assets and the debt ratio of small firms. Their results strongly confirmed the hypothesis that firms seek to match the maturities of assets and liabilities, meaning that firms with less tangible assets have a lower debt ratio. This study confirmed that leverage increases with asset tangibility. Deari and Deari (2009) analysed which determinants influence a company's leverage. They selected two samples. The first one was made up of Macedonian companies registered on the Macedonian Stock Exchange, and the second sample consisted of Macedonian small and medium businesses. They found that tangibility is negatively associated with leverage for listed and unlisted companies and is consistent with the implication of the pecking order theory. They concluded that Macedonian listed companies are evaluated from lenders not just based on tangibility assets, but also from other perspectives, for example goodwill. The authors also found that managers, mostly of unlisted companies, believe that for approving loans in their business plan, profitability and growth are more important than tangibility. Han-Suck Song (2005) analysed the capital structure determinants of Swedish firms. Tangibility confirmed to be highly statistically significant for all three debt measures. The results showed that tangibility has a positive relationship with the total debt ratio and the long-term debt ratio, while it is negatively related to the short-term ratio. Their results supported the maturity matching principle: long-term debt is used to finance fixed tangible assets, while non-fixed tangible assets are financed by short-term debt. According to overall assets, Herciu and Ogrea (2012) argued that a firm is highly competitive as long as its managers are able to mix tangible and intangible assets in the most effective and efficient manner. Therefore, a firm can get the same score of competitiveness by using a different combination of assets and by giving different importance coefficients to the tangible and intangible assets.

### 3. Methodology

For the purposes of this research a data sample consisting of Croatian firms was selected. The sample contains small and medium-sized enterprises as defined in the Accounting Act. A small enterprise has an average of up to 50 employees and an annual income of up to HRK 65 million. A medium enterprise has an average of up to 250 employees and an annual income of up to HRK 260 million. They are randomly selected from the Financial Agency database. The sample consists of 500 Croatian SMEs for the period between 2005 and 2010. The year 2005 is the reference year, and the number of SMEs decreased or stayed the same in other years, depending on whether the SMEs survived and submitted financial statements to the Financial Agency every year (in 2006 the number of observed SMEs was 386, in 2007 447 SMEs, in 2008 425 SMEs, in 2009 380 SMEs and in 2010 366 SMEs). Some enterprises appear twice or three times, while others appear for all six years which makes the dataset unbalanced. The sample included enterprises from all industry sectors in accordance with the National Classification of Activities, except enterprises in public administration and defence, the insurance industry and pension funds. Financial statements in the form of balance sheets and income statements were available for all SMEs in the sample. Different measures of leverage are used in past papers and each leverage measure is defined in a different way. In general, two most common proxies of leverage exist, such as calculated at book value of equity and at market value of equity (Loof, 2004). The most commonly used measure for leverage is defined as total debt over total assets. In this paper, the short-term and long-term debt ratio will be considered separately. Debt is measured by its book value. Market values are not known for SMEs. Managers have to base their financing decisions on book values.

Following Degryse et al. (2010), in this research the leverage of a company is calculated as the ratio of total debt to total assets, long-term debt to total assets and short-term debt to total assets. Research papers offer similar definitions of tangible assets. Many authors used a similar measure of tangibility. Koksall (2013) defined tangibility as the ratio of net fixed assets to total assets. Daskalakis and Thanou (2010) and Psillaki and Daskalakis (2008) measured the assets structure as the ratio of tangible assets divided by the total assets of the firm. Campello and

Giambina (2011) measured overall tangibility as the ratio of total tangible assets to book value of assets. La Rocca et al. (2009) measured tangibility as the ratio of property, plant and equipment to total book assets. Degryse et al. (2010) measured tangible assets as ratio of tangible fixed assets to total assets. According to the authors mentioned in this paper, tangibility is measured as the ratio of tangible assets to total assets.

Descriptive statistics consist of the mean and the standard deviation. The mean deviation represents the average of the sample. The standard deviation measures the amount of variation or dispersion from the average. In order to examine the relationships between variables and to test the hypotheses set out in the study, the Pearson correlation coefficient, which determines the degree to which two variables covary, is used.

### 4. Results

Descriptive statistics of the used ratios are given in Table 1. The numbers in the *mean* column represent mean values of each ratio calculated for all 500 firms in the sample. The numbers in the *standard deviation* column represent *standard deviation* values of each ratio calculated for all 500 firms in the sample.

It is interesting to notice that Croatian SMEs have more short-term loans than long-term loans (they are high short-term levered around 58%). But in general, Croatian SMEs are highly levered (around 70% in the observed period). It is interesting to notice that despite the global economic crisis, Croatian SMEs increased their tangible assets. The reason might be that companies which retain investments in land, equipment and other tangible assets will have smaller costs of bankruptcy than companies that rely on intangible assets.

In order to examine the relationship between tangible assets and leverage, correlation coefficients between the tangible assets and leverage ratios are calculated. The aim is to examine whether high tangible assets means less leverage or vice versa. The results are presented in Table 2.

**Table 1** Descriptive statistics of ratios used in the research

Variable	Year	Mean	Standard deviation
Tangible assets in total assets	2005	0.27	0.29
	2006	0.27	0.28
	2007	0.27	0.28
	2008	0.30	0.31
	2009	0.31	0.32
	2010	0.32	0.32
	2011	0.33	0.29
L1 = Ratio of liabilities and assets (total liabilities/total assets)	2005	0.74	0.36
	2006	0.74	0.39
	2007	0.72	0.42
	2008	0.70	0.40
	2009	0.69	0.41
	2011	0.72	0.40
L2 = Ratio of long-term liabilities and assets (long-term liabilities/total assets)	2005	0.06	0.12
	2006	0.13	0.26
	2007	0.13	0.25
	2008	0.13	0.27
	2009	0.13	0.26
	2010	0.13	0.24
L3 = Ratio of short-term liabilities and assets (short-term liabilities/total assets)	2005	0.58	0.39
	2006	0.60	0.39
	2007	0.59	0.42
	2008	0.57	0.40
	2009	0.57	0.43
	2010	0.57	0.42
2011	0.58	0.41	

Source: Author's calculation

The results of this research indicate that tangible assets are differently correlated with different measures of leverage. The first hypothesis in this research is that tangible assets are positively related to leverage. Different measures of leverage show different results. When total debt to total assets is measured, the results show that there is no significant positive correlation between leverage and tangible assets. According to the first additional hypothesis, tangible assets are positively related to long-term leverage. The results show that the relationship between tangible assets and long-term leverage is positive and statistically significant in all the observed years. The second hypothesis is that there is a negative relationship between tangible assets and leverage. The results also show that when we measure leverage as total debt over total assets, there is no significant negative correlation between leverage and tangible assets. The second additional hypothesis is that tangible assets are negatively related to short-term leverage. The results show that the relationship between tangible assets and short-term leverage is negative and statistically significant in all the observed years. The results show that small and medium-sized companies use their collateral to attract long-term debt, which means that small and medium-sized companies use lower costs and the interest rate of long-term debt in relation to short-term debt. These findings are in accordance with the maturity matching principle that long-term assets are financed with long-term financing and short-term assets are financed with short-term funds. These results suggest that tangible assets are positively correlated with long-term debt of Croatian SMEs because tangible assets constitute a positive signal to the financial institutions that can request the selling of these assets in case of bankruptcy. This means that firms with less tangible assets have a lower debt ratio. These findings are consistent with the trade-off theory which predicts a positive relation between leverage and tangibility but also with the pecking order theory which is generally interpreted as predicting a negative relation between leverage and tangibility.

**Table 2** The correlation coefficients between tangible assets and leverage ratios

Average leverage ratios for 2005-2010	2005	2006	2007	2008	2009	2010
Total debt/Total assets	0.048 (0.316)	0.053 (0.310)	-0.015 (0.756)	-0.033 (0.519)	-0.013 (0.815)	0.024 (0.667)
Long-term debt/Total assets	0.204* (0.000)	0.322* (0.000)	0.282* (0.000)	0.329* (0.000)	0.262* (0.000)	0.279* (0.000)
Short-term debt/Total assets	-0.158* (0.001)	-0.173* (0.001)	-0.187* (0.000)	-0.244* (0.000)	-0.174* (0.001)	-0.145* (0.008)

Note: The figures in parenthesis indicate the statistical significance of the correlation coefficient

Source: Author's calculation

\*statistically significant at the 5% level of significance

## 5. Conclusion and discussion

Previous studies that analysed determinants of capital structure showed various impacts of tangible assets on capital structure depending on the country which they analysed. This paper adds to the existing literature by examining the relationship between tangible assets and the capital structure of small and medium-sized companies in Croatia. Previous studies showed that tangible assets are an important determinant of capital structure. Tangible assets are easy to collateralize, and are commonly assumed to be positively correlated with leverage. The results of this research showed that tangible assets are differently correlated with different measures of leverage, which confirmed that it is important to observe the capital structure through different measures of leverage. The results confirmed the maturity matching principle, that long-term assets are financed with long-term financing and short-term assets are financed with short-term funds. Similar results were reported in research papers by authors like Koksal et al. (2013), Degryse et al. (2010) and Han-Suck Song (2005) who found that tangibility has a positive relationship with the long-term debt ratio, while it is negatively related to the short-term ratio. The results of this research showed that Croatian small and medium-sized companies increased their tangible assets in the period of economic crisis. Small and medium-sized companies in Croatia may use tangible assets as collateral, either providing more access to creditors or as guarantee in case of bankruptcy. This conclusion supports Degryse et al. (2010), who argued that collateral is a way to reduce risk of small and medium-sized companies which use their collateral to attract long-term debt.

For the companies, the costs of long-term debt are lower because banks charge relatively higher interest rates on short-term loans. The results showed that the proportion of short-term debt in total debt is much larger than long-term debt. These findings are in accordance with the maturity matching principle that long-term assets are financed with long-term financing and short-term assets are financed with short-term funds. The general lesson is that the economic importance of tangible assets is different for different measures of leverage. Maturity matching is an important factor in choosing between short-term and long-term debt. Following Hercio et al. (2012), companies with more tangible assets are more competitive. They argue that companies are highly competitive as long as its managers are able to mix tangible and intangible assets in the most effective and efficient manner. For further research it would be interesting to explore different combinations of tangible and intangible assets to see how they affect leverage.

## Appendix

**Table 3** *Company activities pursuant to the Regulations on the Classification of Business Entities according to the National Classification of Activities from the year 2002, which refers to the reference year*

Activities	Company percentage share in total activity (%)
companies dealing in agriculture, hunting and related service activities	0.6
companies dealing in fishing, fish hatchery and fish ponds	0.2
companies dealing in crude oil extraction and natural gas	0.2
companies dealing in extraction of other ores and stone	0.8
companies dealing in food and beverage production	1.4
companies dealing in textile production	2
companies dealing in clothes production	0.4
companies dealing in tanning and dressing of leather	0.2
companies dealing in wood processing, manufacturing goods from wood and cork; except furniture; producing straw objects and wickerwork materials	0.2
companies dealing in publishing and printing	2.4
companies dealing in producing chemicals and chemical products	0.4
companies dealing in producing tire and plastic products	0.8
companies dealing in producing other non – metal mineral products	0.8
companies dealing in producing metal products, except machines and equipment	1.4
companies dealing in producing machines and appliances	1
companies dealing in producing electrical machines and appliances	0.4
companies dealing in producing radio – television and communication devices and equipment	0.6
companies dealing in producing medical, precision and optical instruments and clocks	0.2
companies dealing in producing motor vehicles, trailers and semi – trailers	0.2
companies dealing in producing other means of transport	0.4
companies dealing in producing furniture and other manufacturing industries	1
companies dealing in recycling	0.2

companies dealing in producing electricity supply, gas, steam and hot water	0.2
companies dealing in engineering	11
companies dealing in motor vehicles and motorcycles trade	2.8
companies dealing in wholesale and trade intermediation, except trade in motor vehicles and motorcycles	21.8
companies dealing in retail, except trade in motor vehicles and motorcycles	10.4
companies dealing in hotels and restaurants	4
companies dealing in land transport and pipeline transport	3
companies dealing in water transport	0.4
companies dealing in support and assistance in transportation; travel agencies activity	3
companies dealing in postal services and telecommunication	0.2
companies dealing in financial intermediation, except insurance and pension funds	0.6
companies dealing in support activities in financial intermediation	0.2
companies dealing in real estate business	4.4
companies dealing in renting out machinery and equipment	1.4
companies dealing in computer and related activities	3
companies dealing in research and development	0.2
companies dealing in remaining business activities	14.4
companies dealing in education	1
companies dealing in health care and social care	0.6
companies dealing in recreational, culture and sport activities	1
companies dealing in other service activities	0.6
<b>TOTAL</b>	<b>100</b>

*Source: Author's calculation*

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Martina Harc

## VEZA IZMEĐU MATERIJALNE IMOVINE I STRUKTURE KAPITALA MALIH I SREDNJIH PODUZEĆA U HRVATSKOJ

### SAŽETAK

Imovina poduzeća važna je za donošenje finansijskih odluka u poduzeću. Mala i srednja poduzeća u Hrvatskoj koriste materijalnu imovinu u svojstvu kolaterala prema finansijskim institucijama ili kao jamstvo u slučaju stečaja poduzeća.

Cilj ovog rada je istražiti vezu između materijalne imovine poduzeća i strukture kapitala malih i srednjih poduzeća u Hrvatskoj. Većina prethodnih istraživanja pokazala je i pozitivnu i negativnu vezu između materijalne imovine poduzeća i strukture kapitala. Istraživanje za ovaj rad provedeno je na uzorku od 500 malih i srednjih poduzeća u Hrvatskoj u razdoblju od 2005. do 2010. godine. Za poduzeća u uzorku na raspolaganju su bili godišnji finansijski izvještaji poduzeća u obliku računa dobiti i gubitka te bilance. Da bi se ispitala veza između materijalne imovine poduzeća i strukture kapitala, korišten je Pearsonov koeficijent korelacije. Rezultati istraživanja potvrdili su da materijalna imovina poduzeća različito utječe na kratkoročnu i dugoročnu zaduženost poduzeća. Veza između materijalne imovine poduzeća i kratkoročne zaduženosti poduzeća je negativna i statistički značajna u svim godinama promatranja. Veza između materijalne imovine poduzeća i dugoročne zaduženosti poduzeća je pozitivna i statistički značajna u svim godinama promatranja. Rezultati ukazuju da mala i srednja poduzeća koriste materijalnu imovinu kao kolateral prilikom dugoročnog zaduživanja i na taj način koriste niže kamatne stope i niže troškove obrade kredita u odnosu na kratkoročno zaduživanje.

Rezultati istraživanja pokazuju da se poduzeća financiraju po principu dospijeća, odnosno da se kratkotrajna imovina financira kratkoročnim sredstvima, a dugotrajna imovina dugoročnim finansijskim sredstvima. Rezultati istraživanja pokazali su da je veza između materijalne imovine i dugoročnog zaduživanja pozitivna jer materijalna imovina za finansijske institucije predstavlja jamstvo na način da ju mogu unovčiti u slučaju stečaja poduzeća.

S obzirom kako mjerimo zaduženost poduzeća, rezultati istraživanja podupiru teoriju izbora koja predviđa pozitivnu vezu između materijalne imovine i zaduženosti poduzeća, no također rezultati istraživanja podupiru i teoriju postupka slaganja koja predviđa negativnu vezu između materijalne imovine i zaduženosti poduzeća.

**Ključne riječi:** materijalna imovina, struktura kapitala, zaduženost, mala i srednja poduzeća

Tomislav Galović  
University of Rijeka  
Faculty of Economics  
Ivana Filipovića 4,  
51000 Rijeka, Croatia  
tgalovic@efri.hr  
Phone: +38551355155

UDK: 339.137.2:661.12](100)OECD  
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## THE INTERNATIONAL COMPETITIVENESS OF THE PHARMACEUTICAL INDUSTRY WITHIN 21 OECD COUNTRIES

### ABSTRACT

This research consists of the results of 21 pharmaceutical OECD industries in the period between 2004 and 2009. The main objective of this paper is to measure international trade and competitiveness of the pharmaceutical industry within the observed OECD countries. The methodology in the paper is based on the application of various indicators which include intra-industry trade, trade balance, the import penetration indicator, composition of manufacturing exports and other relevant indicators. The main research results include facts from measuring international trade and competitiveness, as well as an estimation of the position of the pharmaceuticals of the observed OECD countries, especially on the external market, and recommendations and proposals for reaching a higher level of international competitiveness.

**Keywords:** International competitiveness, international trade, OECD countries, pharmaceutical industry

### 1. Introduction

The pharmaceutical industry represents a capital intensive sector whose competitiveness is mostly based on technology, which is a characteristic for segments of the high-technology industry. Although the pharmaceutical industry is based on production innovation and high level of R&D activity like other high-technology industries, there are certain evident particularities (Bezić and Galović, 2013). In other words, the pharmaceutical industry invests, by far, the largest amount in research and development (R&D) (as a proportion of sales) of any industry.

Generally speaking, the pharmaceutical industry is under the influence of two main factors: large pharmaceutical companies and state legislation. State legislation covers the safety, effectiveness, and price of the pharmaceutical products, but it also devotes attention to the importance of R&D and innovative policy. The world's supply of the pharmaceutical industry is characterized by a small number of industrial economies on a high-technology and product innovation level (Karn, 1997). World demand for pharmaceutical products mostly records a growing trend. The demand can be determined by income level as well as price movements, distribution, age of the population, health care system, etc.

One of the main threats to the competitiveness of pharmaceutical companies, among other things, is reflected in the inability to maximize benefits from knowledge and innovation, in other words, the so-called “technological spillovers”. Namely, if pharmaceutical companies produce innovation accepted by competitive companies without any costs, they can face the loss of their competitiveness (Bezić and Galović, 2013).

Products of the pharmaceutical industry are continuously placed on the market with the objective to sustain and prolong human life. Taking into consideration that health is a basic human need, pharmaceutical products have a significant social impact in relation to other industries. Pharmaceutical products are chemical and biological substances used in therapies and prevention of illnesses. The pharmaceutical industry may be viewed from the aspect of consumers. Namely, the pharmaceutical industry comprises a group of companies which sell and distribute medicaments as final products. From the manufacturers’ point of view, the pharmaceutical industry is defined in a narrower sense which implies manufacturing and processing activities (Reekie, 1975: 1). Multinational corporations and foreign direct investments are a driving force behind the world pharmaceutical manufacturing and trade. In general, pharmaceutical products have been classified by the distribution channels and choice of use into two main groups: over-the-counter (OTC) and prescription (ethical) products. The first group (OTC) consists of drugs which have small market shares, but their importance is growing. The second group (ethical) accounts for the bulk of medicines sold on prescription. In many countries, prescription drugs are available only through retail pharmacies or hospitals. Therefore, pharmacists and physicians are important parts of the distribution channel. Price competition is often more aggressive. Generic drugs are out-of-patent products which may be produced by more than one company because their patents have already expired. These types of drugs are price-competitive since they contain the same active ingredient as the original brand. Generic drugs may be substituted for the prescribed brand name if they are cheaper (Prasit, 1997).

In this paper several indicators of export and import of pharmaceuticals in the OECD countries are analyzed in order to measure international trade and competitiveness.

Moreover, definitions of competitiveness by the OECD and DTI (Department of Trade and Industry) point out the significance of technological factors in the creation of competitiveness. DTI (DTI, 1994) defines competitiveness of firms as a possibility for manufacturing of adequate goods and services, at the right time and at the right price. The definition by the OECD (OECD, 1992), from the micro aspect, includes competitiveness which refers to a firms’ ability to compete, to maximize profit and realize growth based on costs and prices by using technology, improvement of quality, and maximization of the effect of its products. Many scientists explore the relationship between competitiveness and technological possibilities. Scientists like Kaldor (1971), Porter (2001), Lall (2001), and Wignaraja (2003), and institutions like the OECD challenged in an argued manner the opinions of other scientists who tried to define competitiveness only from the aspect of price-based factors with emphasis on non-price factors such as technology.

The discussion led to the revision of traditional theories in the framework of the problem of competitiveness. There are two aspects which clarify the term “competitiveness” in more detail. The general macroeconomic aspect presents international competitiveness in the framework of price-based factors. On the other hand, the microeconomic aspect tries to define competitiveness on the firm level with the factors which are not price-based and emphasis is placed on analysis of the rivalry between firms.

The macroeconomic aspect is accompanied by internal and external balance of economies where special attention was devoted to effects of price-based factors on the competition. The microeconomic aspect analyzed internal company dynamics which makes companies strong or weak in relation to influences (Wignaraja, 2003).

The microeconomic aspect refers to presentation of competitiveness on the firm level. Perspective as such includes rivalry among firms and their strategies. In the past few years, the microeconomic aspect implies new dimensions: the impact of technology and innovation. Lall (2001) criticizes the neoclassical theory, whose hypotheses are based on the thesis that technology is available to all firms which are able to use technology at technically “high” levels. However, this long learning process starts by import of technology followed by innovation.

Most experts are partly or completely familiar with two theoretical frameworks from trade based on comparative advantages: Ricardo’s theory and Heckscher-Ohlin (H-O) theory. Ricardo’s theory covers comparative advantages achieved on the basis of different technologies, while the H-O theory uses as an example the equal level of technology in all countries. The H-O theory at the same time points out the significance of comparative advantages in relation to different levels of costs derived from unequal prices of the manufacturing factors in the analyzed countries. Postulates of traditional trade theories are based on the principle of relative prices of comparative advantages, i.e. inequalities in prices which are under the influence of supply and demand factors (Bezić and Galović, 2013).

According to the H-O theory, a comparative advantage of an economy is defined by the relative scarcity factor. However, irregularities in measuring of comparative advantages and verifying of the Heckscher-Ohlin theory were discovered by empirical analysis because of the inability to observe relative prices under the influence of autarky (Balassa, 1989: 42). Bearing in mind these insights, Balassa (1965) suggested avoiding full inclusion of all the components which affect the comparative advantages of different economies. Instead, it is pointed out in Balassa’s analysis that “revealed” comparative advantage is in accordance with the theoretical postulates, except for one exception, which is the inability to analyse relative prices. Deriving conclusions from the analyzed data, Balassa called the results of his research revealed comparative advantage, i.e. RCA (Revealed Comparative Advantage). RCA is, at the same time, an accepted method in the analysis of trade in the observed countries. Furthermore, Balassa created an index (known as Balassa’s Revealed Comparative Advantage Index) whose main objective is measuring comparative advantages of countries. It should be pointed out that Balassa’s index is reflected in the identification of revealed comparative advantages instead of revealing “hidden” elements of economic advantages of an economy (Bezić and Galović, 2013).

However, the initial version of Balassa’s Revealed Comparative Advantage Index was modified and revised, so that, presently, there are different indices for measuring comparative advantages. In some research, the RCA is measured on the global level (Vollrath, 1991), while in other studies, the RCA is measured on the regional level. There are also cases

in which Balassa’s Revealed Comparative Advantage Index was used as a measure for bilateral trade (Dimelis and Gatsios, 1995).

According to Krugman (1985), trade models have given a precise description of the pattern of trade in goods. In traditional theory, the answer emerges from the explanation of trade itself: countries produce goods that would have been relatively cheap in the absence of trade. The comparative advantage may arise from a variety of sources, but in any case the attributes of a country determine what it produces. Krugman (1996) claims that traditional theory is the usual basis for advocating free trade, one of the most strongly held positions in the economics profession (although actually even in traditional theory a second-best case can be made for protection as a corrective for domestic market failures). The new trade theory suggests a more complex view. The potential gains from trade are even larger in a world of increasing returns, and thus, in a way, the case for free trade is all the stronger. New trade models show that it is possible (not certain) that such tools as export subsidies, temporary tariffs, and so on, may shift world specialization in a way favourable to the protecting nation.

The basic scientific hypothesis of the paper is set up, namely, that it is possible to estimate the international competitiveness of the pharmaceutical industry within 21 OECD countries (including several EU Member Countries) by using various international trade and competitiveness indicators.

In this relation, the basic objective of the research is to measure international competitiveness, objectively estimate international trade of the pharmaceuticals of 21 OECD countries, and to propose measures and activities for the improvement of their international trade competitiveness in accordance with the results.

The paper consists of five systematically interrelated parts. After the Introduction, the second part of the paper presents the research methodology. The third part includes the analytical framework and results of international competitiveness based on the analysis of foreign trade activity and export competitiveness of the OECD pharmaceutical industry. The final part comprises proposals, recommendations and conclusions.

## 2. Methodology

The analytical aspect is based on scientific results of several indicators that show the level of international competitiveness of the pharmaceutical industry which includes 21 OECD countries. Implemented indicators have been frequently used in contemporary economic research, which evaluates the economy's structural strengths and weaknesses *via* the composition of international trade flows (Bezić and Galović, 2013). In other words, these indicators address the question of trade specialization and performance in international markets. The purpose of the methodology used in this study also implies the importance of the foreign market for pharmaceuticals in a country and what degree of domestic demand is satisfied by imports. Furthermore, the most commonly used indicators, indices, and ratios are implemented to assess trade patterns and characteristics, and changes in them. Besides elementary and well-known indicators, this research uses basic indicators that are suggested by the OECD Statistical Database (2014) and World Bank (2014). These indicators were used in previous studies (Bezić and Galović, 2013; Bezić and Galović, 2013; Kandžija et al., 2014; Bezić and Galović, 2014) of other manufacturing sectors which have provided objective results of international trade and international competitiveness.

Some analyses of factors influencing the success or failure of efforts to promote industrialization and growth conclude that a growing level of intraindustry trade (plays an important positive role (World Bank, 2014). Intraindustry exchange produces extra gains from international trade over and above those associated with comparative advantage because it allows a country to take advantage of larger markets.

Intra-industry trade (IITR) represents the value of total trade remaining after subtraction of the absolute value of net exports or imports of pharmaceuticals. For comparison between countries and industries, the measures are expressed as a percentage of each industry's combined exports and imports. Intra-industry trade represents one of the key empirical reasons for emphasizing the role of increasing returns and imperfect competition in the world economy. According to the OECD Statistical Database (2014), intra-industry trade of pharmaceuticals is calculated as follows:

$$IITR_i = \left( 1 - \frac{|expo_i - impo_i|}{expo_i + impo_i} \right) \times 100 \quad (1)$$

wherein:

$expo_i$  - export activity of sector "i"

$impo_i$  - import activity of sector "i"

This index varies between 0 and 100. If a country exports and imports roughly equal quantities of a certain product, the index value is high. Whereas if trade is mainly one-way (whether exporting or importing), the index value is low.

The "contribution to the trade balance" or "CMTB" makes it possible to identify an economy's structural strengths and weaknesses *via* the composition of international trade flows (OECD Statistical Database, 2013). It takes into account not only exports, but also imports, and tries to eliminate business cycle variations by comparing an industry's trade balance with the overall trade balance. It can be interpreted as an indicator of "revealed comparative advantage" (Balassa, 1965: 93; Balassa, 1978: 203) as it indicates whether an industry performs relatively better or worse than the manufacturing total, no matter whether the manufacturing total itself is in deficit or surplus. The "contribution to the manufacturing trade balance" is the difference between the actual and this theoretical balance:

$$CMTB_i = \left[ \frac{(expo_i - impo_i) - (expo_{manuf} - impo_{manuf}) \frac{expo_i + impo_i}{expo_{manuf} + impo_{manuf}}}{expo_{manuf} + impo_{manuf}} \right] \times 100 \quad (2)$$

wherein:

$expo_i$  - export activity of sector "i"

$impo_i$  - import activity of sector "i"

$expo_{manuf}$  - export activity of total manufacturing sectors

$impo_{manuf}$  - import activity of total manufacturing sectors

A positive value for an industry indicates a structural surplus and a negative one a structural deficit. The indicator is additive and individual industries can be grouped together by summing their respec-

tive values: by construction, the sum over all industries is zero. The next indicator called "Export import ratio" shows exports as a percentage of imports. The EXIM ratio can be calculated as follows:

$$EXIM_i = \frac{expo_i}{impo_i} \times 100 \quad (3)$$

wherein:

$expo_i$  - export activity of sector "i"

$impo_i$  - import activity of sector "i"

Another simple indicator is used within this paper. Hence, this indicator (TBAL) is calculated in real numbers of national currencies and highlights the trade pattern of each industry. It can be seen in the following formula:

$$TBAL_i = expo_i - impo_i \quad (4)$$

Trade balance is one of the macroeconomic indicators which are used to gauge the competitiveness of a sector at the national level. When exports exceed imports, the balance is in surplus, and when imports exceed exports, the balance is in deficit.

Furthermore, composition of manufacturing exports of goods indicator (XSHM) shows the exports in a given manufacturing industry (in this case the OECD pharmaceutical industry) as a percentage of total manufacturing exports. The XSHM indicator is calculated as follows:

$$XSHM_i = \frac{expo_i}{expo_{manuf}} \times 100 \quad (5)$$

wherein:

$expo_i$  - export activity of sector "i"

$expo_{manuf}$  - export activity of total manufacturing sectors

Finally, the import penetration (MPEN) indicator can be calculated as a ratio of imports to the sector's production adjusted for the foreign trade balance

(difference between exports and imports) according to the following formula:

$$MPEN_i = \frac{impo_i}{prod_i - expo_i + impo_i} \times 100 \quad (6)$$

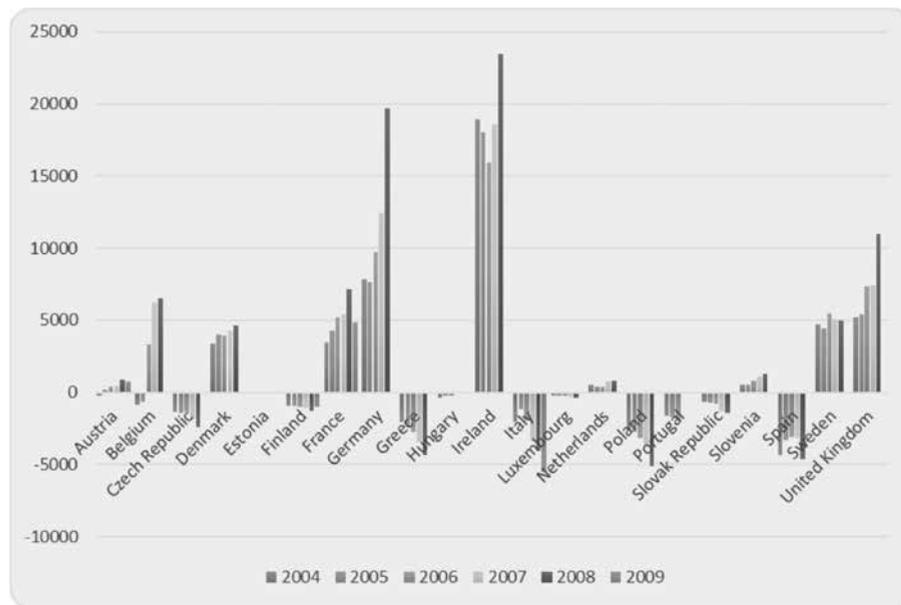
For a given country, a value close to 100 in a certain industry, implies that domestic demand is mainly fulfilled by imports and domestic production tends to be exported (the OECD Statistical Database, 2013). A value close to 0 means self-sufficient, i.e. domestic demand is mainly satisfied by domestic production. A value above 100 illustrates measurement problems that may occur when combining production and trade data. It is important to bear in mind that exports can exceed production.

## 3. Results

In the analysis of the outlined problem, the starting point is to identify the international competitiveness of the pharmaceutical industry of 21 OECD countries in the period between 2004 and 2009. One of the main reasons of choosing this period and number of observed countries lies in the limited availability of data and observations for a specific subsector (in this case pharmaceuticals – code C2423) which were found in the OECD Statistical Database (2014). Observed countries are classified as a group of developed economies according to the UN Classification (United Nations, 2013) prepared by the Development Policy and Analysis Division (DPAD) of the Department of Economic and Social Affairs of the United Nations Secretariat (UN/DESA). In order to analyze pharmaceuticals, it is important to consider ongoing trade within examined countries. Several indicators, which are based on export and import, can be used to measure the performance and competitiveness of a certain sector for each country.

In a given year, the values of an indicator can differ between countries, which allow an international comparison. The value of an indicator may also differ between different years, within a different country. In this particular study, six indicators will be calculated for the 21 OECD member countries: IITR, CMTB, EXIM, TBAL, XSHM and MPEN. The data is extracted from the OECD Statistical Database. Values can be found within Appendix I.

Figure 1 Trade balance (TBAL) indicator from 2004 to 2009

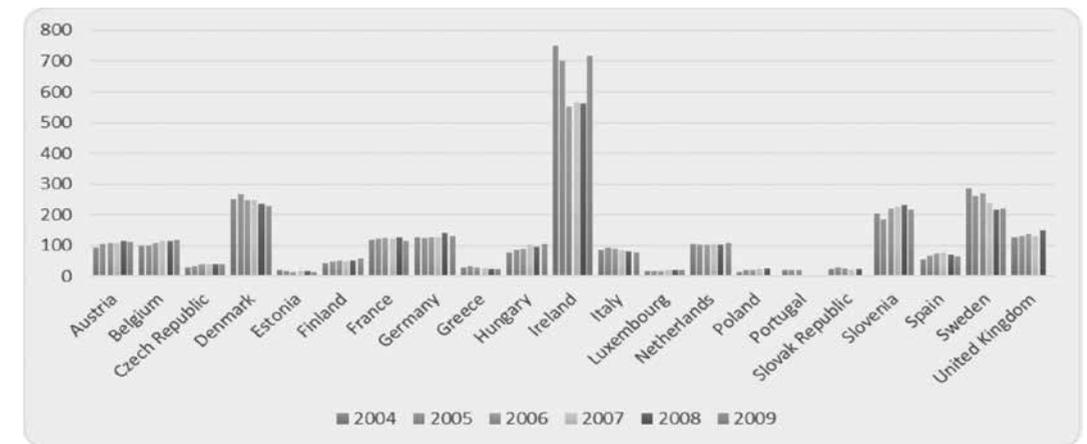


Source: OECD Database, 2014

The trade balance is the difference between exports and imports in the specified sector. This indicator shows the competitiveness of a certain sector at the national level. It is shown in real number and in national currencies, so when comparing the countries the size of the company is important. The larger the economy, the higher the trade balance will be. Obvious positive scores are found in Germany, Ireland and the UK. Ireland creates a great surplus on the trade balance of pharmaceuticals. One of the reasons are Ireland's intellectual property laws which provide companies with generous incentives to innovate, the Irish tax system that offers huge support to turn brilliant ideas into the finished product, a highly competitive corporate tax rate, which is a major incentive, and no tax is paid on earnings from intellectual property where the underlying R&D work was carried out in Ireland. Furthermore, pharmaceuticals are a major contributor to the Irish economy. Ireland is the No. 1 European location for international pharmaceutical investment as well. 9 out of the top 10 pharmaceutical companies are located in Ireland, 7 out of 10 pharmaceutical blockbuster are produced in Ireland, which is home to over 100 companies engaged in pharmaceutical and chemical related activities.

Because of its highly advanced incorporation of the latest technology and the strict quality control procedures, this country creates a wide range of products and services. Hereby it is not only the largest net exporter of pharmaceuticals in Europe, but in the whole world as well. Germany also shows rising figures, mainly because of the great competitiveness of the country. The chemical and pharmaceutical industry is Germany's third-largest industrial sector in terms of revenues. It is characterized by an extensive and comprehensive infrastructure that integrates state-of-the-art transportation networks with high-quality communication and energy infrastructure. Pharmaceutical companies in Germany benefit from the close proximity of leading machine and equipment manufacturers. This guarantees continuous production and short downtimes. Luxembourg notes the biggest deficit. Being one of the smallest countries in Europe and being orientated towards the service and financial sector this country imports far more pharmaceuticals than it imports. The biggest deficits of the OECD pharmaceutical industry were recorded in Spain, Luxembourg, Greece and the Czech Republic. Furthermore, the final results of the export import ratio are presented in Figure 2.

Figure 2 Export import ratio indicator from 2004 to 2009 (EXIM)

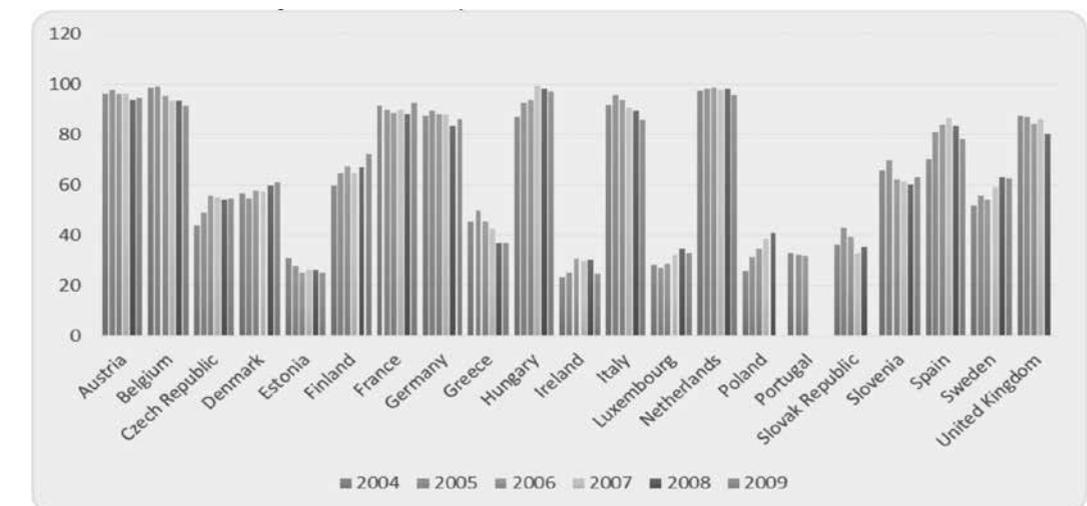


Source: OECD Database, 2014

The export-import ratio identifies the exports as a percentage of imports. A percentage higher than one hundred means that exports are higher than imports and will consequently create a surplus on the national trade balance.

In this figure the exports as a percentage of imports in the pharmaceutical industry are shown. It must be noticed that Denmark, Slovenia and Sweden obtain generally higher scores but the most remarkable is Ireland. Ireland is a market leader in the pharmaceutical industry, with over 120 overseas companies having their plants there including 9 of the 10 largest pharmaceutical companies in the world. This explains the rising export import ratio of 718% implying that Ireland exports seven times more pharmaceuticals than it imports. This indicator also shows the worst performers which include

Figure 3 Intra-industry trade indicator (IITR) from 2004 to 2009



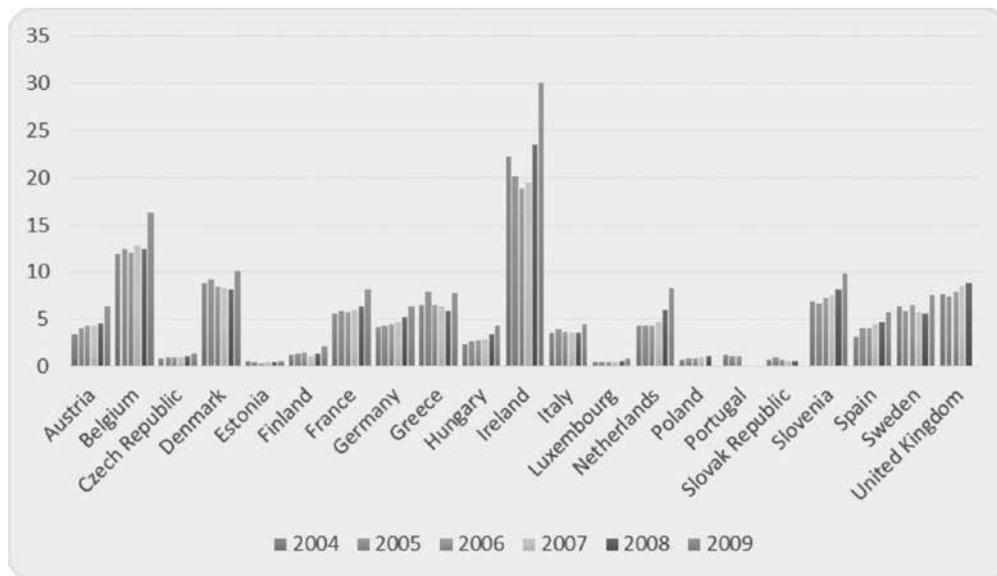
Source: OECD Database, 2014

Poland, Greece, Estonia, the Czech Republic and the Slovak Republic. In addition, Figure 3 shows the intra-industry trade of the pharmaceutical industry of 21 OECD countries in the period between 2004 and 2009.

This indicator shows the value of total trade remaining after subtraction of the absolute value of net exports or imports of pharmaceuticals in Europe. In this figure, high scores are obtained by some well-developed and industrialized EU countries. In 2009, Austria gets a score of 95% followed by Belgium with 91%. France, Germany, Hungary, Italy and the Netherlands all vary in score between 86% and 96%.

High percentages imply that these entities export and import roughly equal quantities of pharmaceuticals, whereas lower scores imply a one-way trade (import or export). Lower percentages are found in countries such as Estonia, Ireland, Luxembourg and Poland, varying in scores between 24% and 35% which could indicate the possible existence of one-way trade or a lower level of trade. This means that the export and import in these countries form a significant part of the total traded goods.

Figure 4 Composition of manufacturing exports of goods indicator from 2004 to 2009 (XSHM)



Source: OECD Database, 2014

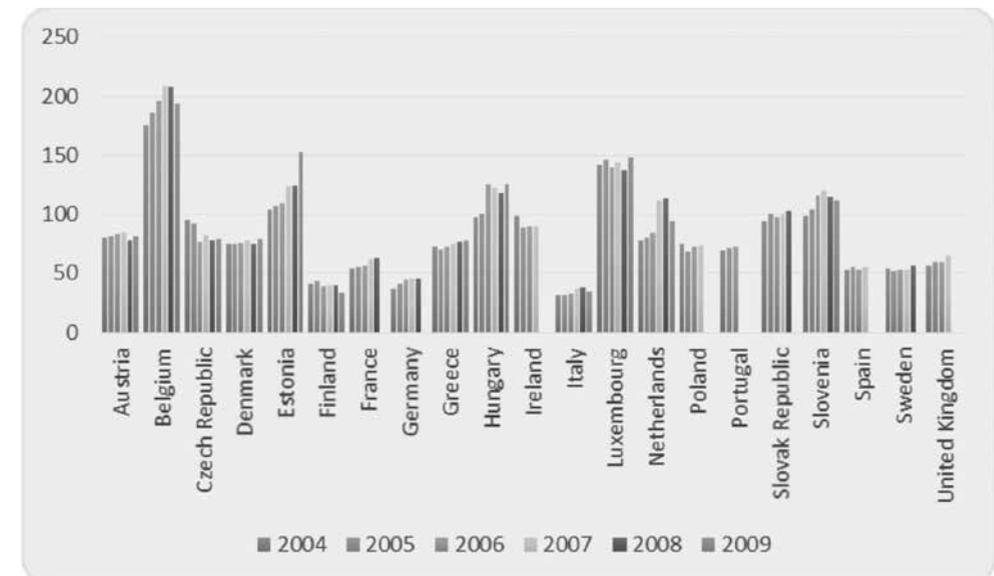
The logic of this outcome becomes clear as Belgium and the Netherlands are smaller countries and thus have an entire export- and import-based economy with a much more diversified product portfolio. Germany is one of the most powerful economies of the EU, which produces and trades a lot of different goods across Europe. Portugal and Ireland on the other hand score lower, implying that the share of pharmaceuticals to the total amount of traded goods is more significant. Figure 4 represents the composition of manufacturing exports of pharmaceuticals of 21 OECD countries in the period between 2004 and 2009.

This indicator shows the proportion of export for a specific sector compared to the total export of the manufacturing sector. This will thus identify how important this sector is in the outflow of manufactured products to other countries. In this figure the share of the pharmaceutical industry in comparison to the total manufacturing exports are revealed by the composition of manufacturing exports of goods. Ireland achieves an increasing percentage of pharmaceutical -goods compared to all exported goods, reaching 30% of the total. It has to be pointed out that the pharmaceutical industry in Ireland is highly advanced. It incorporates the latest technology, state of the art equipment and strict quality control procedures.

Ireland's pharmaceutical industry consists of a wide range of products and services, from research and development for new medicines to the manufacturing and marketing of new medicines for humans and animals. An important aspect in the development of the sector, which has helped to significantly boost its contribution to the Irish economy, has been the success of the sector in diversifying the nature of its investment in Ireland from the original bulk active plants to higher value activities. The maintenance of a culture of support for innovation is significant to the success of such a move up the value chain. The other major impacts come from the fiscal environment of Ireland. Belgium is the second best country in this chart with an approximate gap of 15% between first and second place, however pharmaceuticals are taking an increasing part of the total exports. Moreover, the final results of import penetration indicator are presented in Figure 5.

Import penetration shows how dependant domestic demand in a certain sector is relying on foreign producers rather than on domestic production.

Figure 5 Import penetration of the OECD pharmaceutical industry from 2004 to 2009 (MPEN)

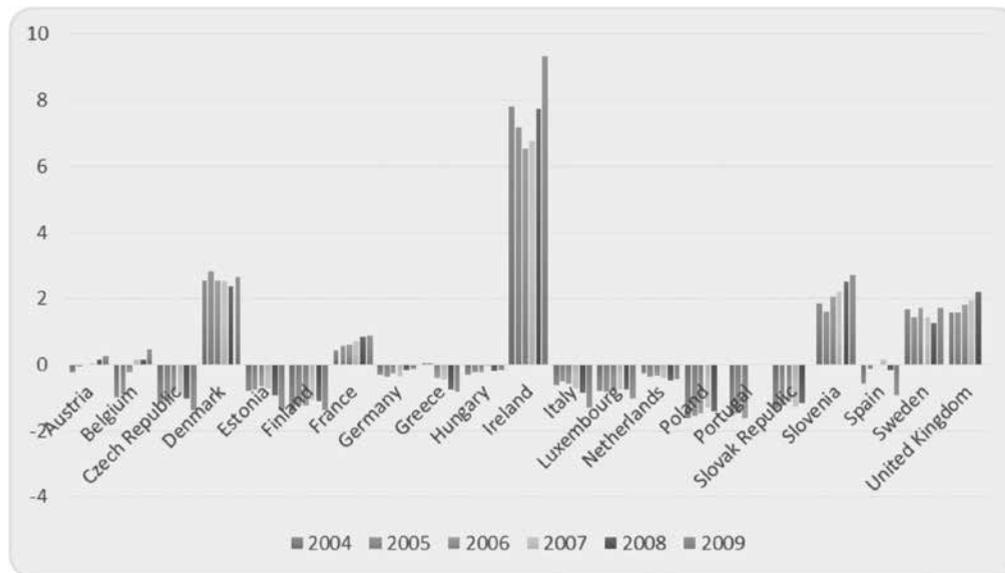


Source: OECD Database, 2014

It is defined as the ratio between the values of imports as a percentage to domestic demand for this specific sector. Smaller countries usually have higher ratios as they have smaller economies and will rely more heavily on foreign producers. The ratio of imports to the sector's production adjusted to the foreign trade balance gives more insight in the import penetration. In other words, this is the percentage of total demand for pharmaceuticals that is covered by import. Belgium stands out in this graph, as it is a small country living from the import and export, especially of pharmaceuticals. Due to very high figures in export, this rate exceeds the 100% mark. Italy, Finland and Germany achieve the lowest scores, which implies that these countries are most self-sufficient. Finally, the results of the contribution to the trade balance are presented within Figure 6.

The contribution to the trade balance identifies the competitive advantage of a country in the specified sector. As it is compared to the total manufacturing in this country, the indicator will then show how important the specific sector is for the country. The higher the value of this indicator the more important this sector is for the manufacturing sector as a whole.

Figure 6 Contribution to the trade balance indicator from 2004 to 2009 (CMTB)



Source: OECD Database, 2014

The composition of international trade flows makes it easier to visualize an economy's structural strengths and weaknesses. The contribution to the trade balance compares the pharmaceutical industry's trade balance with the overall trade balance. First of all, in this graph a few remarkably high results are visible in Denmark, Ireland, Slovenia, Sweden and UK with a positive score between 1.7% and 9.4%. This makes sense because the previous graphic indicated that pharmaceuticals are a significant part of the total export of these countries.

There are, on the other hand, many countries obtaining an extremely low score such as the Czech Republic, Estonia, Finland and Luxembourg. These countries import more pharmaceuticals than they export and thus create a negative effect on the total trade balance. Finally, yet importantly, there are a few countries such as Austria, Belgium, France and Spain which recorded results around the zero mark. The indicator of revealed comparative advantage shows whether the pharmaceutical industry performs relatively better or worse than the manufacturing total (independent of whether this total is in deficit or surplus). Projecting this on the obtained results, high scores are translated in structural surpluses and negative on structural deficits.

#### 4. Conclusion

Aggregation of the results of the calculated indices leads to a series of interesting insights related to international competitiveness of the OECD pharmaceutical industry. When it comes to the OECD intra-industry trade of pharmaceuticals, older European member states got higher scores. The logic of this outcome becomes clear as Belgium and the Netherlands are smaller countries and thus have an entire export- and import-based economy with a much more diversified product portfolio. Germany is one of the most powerful economies of the EU, which produces and trades many different goods across Europe. Portugal and Ireland on the other hand score lower, implying that the share of pharmaceuticals to the total amount of traded goods is more significant.

The composition of international trade flows makes it easier to visualize an economy's structural strengths and weaknesses. Remarkably high results are visible in Denmark, Ireland, Slovenia, Sweden and the UK. This makes sense because the results of several indicators indicated that pharmaceuticals are a significant part of the total export of these countries. As a market leader in the pharmaceutical industry, Ireland includes 9 of the 10 largest pharmaceutical companies in the world. This explains

the highest export-import ratio of 718% implying that Ireland exports seven times more pharmaceuticals than it imports. It has to be pointed out that most of the above-mentioned countries are characterized by above-average share of R&D activity and innovation, which enables faster adjustment to new conditions on the international market and an increase in international competitiveness.

Ireland also creates a great surplus on the trade balance of pharmaceuticals. Because of its highly advanced incorporation of the latest technology and the strict quality control procedures, this country creates a wide range of products and services. Germany as well shows rising figures, mainly because of the great competitiveness of the country. Luxembourg has recorded the biggest deficit. Being one of the smallest countries in the EU, this country imports far more pharmaceuticals than it exports. Ireland achieves an increasing percentage of pharmaceutical goods compared to all exported goods, reaching 30% of the total. In terms of the trade balance indicator, Belgium is the second best country with an approximate gap of 15%. However, pharmaceuticals are taking an increasing role of the total export's activity. Overall, the leading position of Ireland as a global market player is shown in all indicators. The main reason for this is the establishment of the most important players in the pharmaceutical sector in that country. Furthermore, the majority of the implemented indicators also pointed to the vital role Germany and France as powerful European and OECD countries. Finally, yet importantly, the smaller member states show differences in export- and import-figures. States such as Belgium and the Netherlands live from import and export, which becomes visible in the analysis of the pharmaceutical sector. On the other hand, countries like Luxembourg have lower percentages concerning pharmaceuticals, as they do not imply a great part of total industry in that country.

Generally, the conclusion is derived that most highly developed countries with their propulsive pharmaceutical sectors have preconditions for improvement of international competitiveness and development of revealed comparative advantages, while other countries have smaller possibilities for reaching this scenario. Concerning the results, the basic hypothesis is confirmed. In other words, the level of international trade and competitiveness of the pharmaceutical industry within 21 OECD countries (including several EU Member Countries) is

shown. Hereby, the main objective and purpose of this research are validated.

Consequently, in order to improve international competitiveness and comparative advantages of firms, the branch of medical and pharmaceutical products should invest in:

- creating business strategies which increase the market share after the introduction of generic medicines,
- marketing and other promotional activities,
- R&D activities and innovation activities, and continuous engagement and training of researchers and R&D staff in firms.
- raising the firms' awareness of growing markets and expansion to growing markets,
- more detailed identification of activities of the growing competition, especially from Asian countries,
- revision and conversion of the export expansion programme,
- establishing of stronger partnerships with large clients,
- openness to "joint venture" i.e. common investments in order to supply new technology.

Besides those propositions, the observed countries should provide an adequate and company-friendly fiscal environment in order to achieve a higher level of competitiveness. Application of the results of this research may contribute to the improvement of international competitiveness in the OECD pharmaceutical industry, but this implies undertaking measures within the pharmaceutical firms. Therefore, in order to overcome the problems of international competitiveness, a comprehensive approach is necessary on the level of macro-environment and on the level of micro-environment. In other words, firms should ensure all the necessary preconditions for adjustment to a competitive environment. Adoption of the above-mentioned measures would provide the OECD pharmaceutical industry with a greater possibility to take and keep a competitive position on the market. Adequate transfer of knowledge and technology may, of course, result in growth of export activity of the pharmaceutical firms in the OECD. Opening room for investments also plays a significant role in the stimulation of export expansion of pharmaceutical firms.

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Appendix I. The detailed results of included indicators for 21 OECD pharmaceuticals from 2004 till 2009

Industry		C2423 Pharmaceuticals					
Time		2004	2005	2006	2007	2008	2009
Variable	Country						
Intra-industry trade	Austria	96,332413	97,891587	96,135589	96,163133	93,737946	94,836733
	Belgium	98,731271	99,093075	95,708512	93,343513	93,497901	91,493544
	Czech Republic	43,840516	49,021207	56,068877	55,229044	54,114993	54,592337
	Denmark	56,801376	54,69424	57,705537	57,528698	59,893096	60,88576
	Estonia	30,964052	27,668888	24,830374	26,052788	26,226789	24,949941
	Finland	59,935994	64,620522	67,340924	64,634528	67,133336	72,271478
	France	91,373408	90,091383	88,815406	89,90317	88,433875	92,593369
	Germany	87,492617	89,556185	88,42365	87,880071	83,654374	86,178373
	Greece	45,34683	49,812018	45,495801	42,494785	37,065878	36,906089
	Hungary	87,156539	92,576501	94,11188	99,589304	98,301952	97,131534
	Ireland	23,578479	24,90645	30,689244	30,023706	30,175557	24,443152
	Italy	92,071229	96,049321	93,733356	90,777906	89,716083	86,096415
	Luxembourg	28,245361	27,046128	28,640471	32,092271	34,826136	33,027388
	Netherlands	97,687787	98,291193	98,582342	98,062261	98,39685	95,978668
	Poland	25,679919	31,473032	34,470826	38,808856	41,043749	..
	Portugal	32,930086	32,219881	31,848216	..	..	..
	Slovak Republic	36,157942	43,207791	39,457484	33,106683	35,52927	..
	Slovenia	66,079077	69,9613	62,373673	61,479797	60,321347	63,008001
	Spain	70,359497	81,024032	83,785583	86,541423	83,615784	78,478495
	Sweden	52,009968	55,679726	54,137112	59,141154	63,161405	62,764432
United Kingdom	87,618965	87,059332	84,25828	86,358402	80,259844	..	
Contribution to manufacturing trade balance	Austria	-0,2322723	-0,0445316	-0,0199465	0,0105917	0,1412318	0,257773
	Belgium	-1,0053981	-0,8897019	-0,2398772	0,1424674	0,1567182	0,4654558
	Czech Republic	-1,1254839	-1,080932	-0,865182	-0,9037473	-1,0101975	-1,3673808
	Denmark	2,5591065	2,821932	2,5426936	2,5052254	2,3651546	2,6623976
	Estonia	-0,795995	-0,7440493	-0,6335228	-0,7124736	-0,9058308	-1,3591204
	Finland	-1,4063437	-1,2328366	-1,2364241	-1,055522	-1,1070553	-1,355168
	France	0,420156	0,5670528	0,6138547	0,7000527	0,8387718	0,8936619
	Germany	-0,2940933	-0,3592537	-0,2618166	-0,360714	-0,1432429	-0,1367789
	Greece	0,0495501	0,0072663	-0,3955968	-0,452799	-0,7326636	-0,8211778
	Hungary	-0,2897914	-0,233209	-0,2377204	-0,0627967	-0,1917351	-0,1730119
	Ireland	7,8291417	7,1882269	6,53515	6,7855706	7,7338923	9,3464578
	Italy	-0,6198078	-0,4984774	-0,5656408	-0,7101634	-0,8570462	-1,3062802
	Luxembourg	-0,7973062	-0,8171161	-0,7566005	-0,7618185	-0,7556456	-1,027607
	Netherlands	-0,2572794	-0,3494683	-0,3471602	-0,3923161	-0,4539914	-0,4470973
	Poland	-1,6093499	-1,5540985	-1,4606183	-1,2876828	-1,415548	..
	Portugal	-1,5564948	-1,4757322	-1,6028704	..	..	..
	Slovak Republic	-1,3416036	-1,2432833	-1,1000549	-1,2524576	-1,1529711	..
	Slovenia	1,8520279	1,6153854	2,0698708	2,1823799	2,5100071	2,7133828
	Spain	-0,5835452	-0,1404999	-0,000794	0,1407937	-0,1445892	-0,9068881
	Sweden	1,6941162	1,4455599	1,7228068	1,4492543	1,24835	1,7015988
United Kingdom	1,5814102	1,5672127	1,8027248	1,9688954	2,2038529	..	

Export import ratio	Austria	92,924332	104,30765	108,0395	107,97991	113,36077	110,88875
	Belgium	97,494332	98,202452	108,96783	114,26235	113,90854	118,59466
	Czech Republic	28,074194	32,468936	38,955353	38,149257	37,09428	37,544333
	Denmark	252,10415	265,66922	246,58719	247,65257	233,9283	228,48403
	Estonia	18,318028	16,055654	14,175045	14,977411	15,092539	14,253032
	Finland	42,791861	47,732879	50,762395	47,748165	50,526847	56,582099
	France	118,88206	121,99681	125,18616	122,46157	126,15768	115,99819
	Germany	128,59072	123,32349	126,18383	127,58288	139,07895	132,07679
	Greece	29,32163	33,166447	29,44632	26,979923	22,748996	22,628735
	Hungary	77,236677	86,179003	88,878601	100,82478	96,60608	105,90635
	Ireland	748,23113	703,00485	551,69413	566,14029	562,7881	718,22508
	Italy	85,3074	92,398936	88,205811	83,113134	81,350106	75,587098
	Luxembourg	16,445181	15,637769	16,713673	19,11304	21,084532	19,780123
	Netherlands	104,73388	103,47703	102,87609	103,95206	103,25854	108,37964
	Poland	14,731475	18,675368	20,824623	24,076295	25,820783	..
	Portugal	19,710363	19,203635	18,94016	..	..	..
	Slovak Republic	22,068779	27,557359	24,577592	19,837034	21,602184	..
	Slovenia	202,66767	185,87233	220,64811	225,31012	231,55758	217,42001
	Spain	54,272774	68,101174	72,095687	76,275787	71,844608	64,579923
	Sweden	284,54167	259,19717	269,43234	238,17399	216,64907	218,65181
United Kingdom	128,26109	129,72839	137,3654	131,59298	149,19062	..	
Trade balance	Austria	-271,73536	187,29508	408,03489	468,31762	863,3299	764,46069
	Belgium	-852,03035	-680,9595	3314,2865	6267,7875	6496,763	..
	Czech Republic	-1374,7979	-1432,4225	-1374,5271	-1850,7123	-2392,5141	..
	Denmark	3394,5853	4022,3864	3907,0876	4320,665	4610,5016	..
	Estonia	-9,4226667	-10,41075	-11,907	-15,205524	-19,604399	..
	Finland	-955,25823	-963,87556	-1043,3112	-1093,4107	-1265,3268	-993,93229
	France	3461,1484	4282,4948	5171,6719	5422,1209	7173,5029	4833,3459
	Germany	7846,1399	7636,925	9745,01	12455,82	19686,165	..
	Greece	-2046,6393	-2382,3543	-2737,1946	-3482,3163	-4333,1659	..
	Hungary	-365,398	-249,456	-246,468	21,093	-118,488	..
	Ireland	18910,724	18034,104	15910,144	18592,239	23426,441	..
	Italy	-2060,6667	-1144,1652	-1993,0105	-3363,3286	-4063,9084	-5544,5844
	Luxembourg	-252,88894	-272,13712	-273,47506	-316,41228	-367,68698	..
	Netherlands	501,28971	407,92917	398,41822	713,63938	831,75762	..
	Poland	-2610,4024	-2758,1546	-3178,6425	-3725,848	-5157,5773	..
	Portugal	-1651,4289	-1708,4839	-1942,2356	..	..	..
	Slovak Republic	-655,08877	-711,20712	-815,92784	-1307,3758	-1414,4358	..
	Slovenia	541,45011	530,01058	799,66479	1066,7578	1308,8113	..
	Spain	-4382,2976	-3309,4916	-3070,0965	-3186,2705	-4642,9891	..
	Sweden	4696,8288	4437,0885	5505,7784	5089,4979	4971,6277	..
United Kingdom	5166,9091	5405,1535	7346,9234	7401,3148	10949,43	..	

Composition of manufacturing exports of goods	Austria	3,3602985	4,0611058	4,3500914	4,2589687	4,4959659	6,3203286
	Belgium	11,890738	12,3607	12,088439	12,871015	12,402626	16,324377
	Czech Republic	0,8487294	0,9220194	0,9647549	0,9854232	1,0339446	1,3621462
	Denmark	8,7651013	9,1373737	8,4579723	8,2456379	8,1416989	10,053718
	Estonia	0,5670414	0,4316542	0,344325	0,4056118	0,4539459	0,495726
	Finland	1,2031303	1,377723	1,43141	1,1394164	1,3716263	2,1321065
	France	5,6069574	5,8306581	5,7247107	5,9439442	6,3664269	8,2111309
	Germany	4,1847066	4,3117746	4,3949992	4,6872605	5,1704257	6,3327019
	Greece	6,5271921	7,9427664	6,4611993	6,3290818	5,8396033	7,7532019
	Hungary	2,3234544	2,6002465	2,7596097	2,8678822	3,3624976	4,3214155
	Ireland	22,201398	20,134074	18,872872	19,475337	23,49595	30,105889
	Italy	3,503831	3,8658226	3,7013098	3,470842	3,4613307	4,4781054
	Luxembourg	0,4305985	0,4163386	0,4067767	0,4850034	0,5839305	0,7652098
	Netherlands	4,3280992	4,246244	4,3488661	4,7482332	5,9382847	8,2831096
	Poland	0,6475239	0,7638996	0,8101326	0,8995384	1,1056484	..
	Portugal	1,1734024	1,1386412	1,1232905	..	..	..
	Slovak Republic	0,6971882	0,8855558	0,6596338	0,5834908	0,5830177	..
	Slovenia	6,9227407	6,6352015	7,2894653	7,4957014	8,1899714	9,831477
	Spain	3,1301537	4,0063759	4,0417508	4,415705	4,6715543	5,6939694
	Sweden	6,3739892	5,8701954	6,5203746	5,7242003	5,5842459	7,5410643
United Kingdom	7,6410784	7,4227127	7,8885386	8,5106994	8,8503199	..	
Import penetration	Austria	130,41857	149,31524	176,59609	159,57167	..	..
	Belgium	312,27321	339,13296	449,94391	601,32819	..	..
	Czech Republic	82,456038	81,305613	84,231725	91,031041	..	..
	Denmark	88,582863	80,889904	83,088777	87,628105	..	..
	Estonia	..	..	..	..	..	..
	Finland	97,034344	104,51986	106,85902	99,520579	..	..
	France	44,603422	47,389148	48,155658	51,199115	54,25987	..
	Germany	95,771697	99,623784	108,90869	106,6316	..	..
	Greece	91,277748	99,559991	97,52258	96,588739	..	..
	Hungary	64,579693	70,484082	77,601123	89,992041	..	..
	Ireland	-24,791718	-28,01127	-43,893388	-91,544217	..	..
	Italy	48,40405	57,395532	56,098006	55,848434	..	..
	Luxembourg	..	..	..	..	..	..
	Netherlands	118,1272	188,05371	213,47399	247,45511	..	..
	Poland	64,30995	63,524783	65,661744	67,823274	..	..
	Portugal	70,170043	68,646244	71,272406	..	..	..
	Slovak Republic	93,804241	98,969796	97,801917	97,744132	..	..
	Slovenia	71,972969	85,21837	98,250006	..	..	..
	Spain	54,230354	62,2493	63,403033	67,320046	..	..
	Sweden	52,717373	52,32	59,232236	60,046639	..	..
United Kingdom	92,102384	84,336676	90,148518	97,20358	..	..	

Tomislav Galović

## MEĐUNARODNA KONKURENTOST FARMACEUTSKE INDUSTRIJE 21 OECD ZEMLJE

### SAŽETAK

Rad uključuje rezultate farmaceutske industrije 21 zemlje OECD-a u razdoblju od 2004. do 2009. godine. Temeljni je cilj istraživanja izmjeriti međunarodnu trgovinu i konkurentnost farmaceutske industrije zemalja OECD-a. Metodologija rada zasniva se na primjeni različitih pokazatelja koji uključuju intraindustrijsku trgovinu, trgovinsku bilancu, penetracije uvoza, udjela u industrijskom izvozu i ostalih važnih pokazatelja. Glavni rezultati istraživanja uključuju činjenice koje proizlaze iz mjerenja međunarodne trgovine i konkurentnosti te daju procjenu položaja farmaceutske industrije analiziranih OECD zemalja osobito na vanjskom tržištu, kao i preporuke i prijedloge radi dosega više razine međunarodne konkurentnosti.

**Ključne riječi:** međunarodna konkurentnost, međunarodna trgovina, zemlje OECD-a, farmaceutska industrija

*Regina Moczadlo*  
Hochschule Pforzheim University  
Tiefenbronnerstr. 65  
75175 Pforzheim, Germany  
regina.moczadlo@hs-pforzheim.de  
Phone: +497231286595

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# CREATING COMPETITIVE ADVANTAGES – THE EUROPEAN CSR-STRATEGY COMPARED WITH PORTER'S AND KRAMER'S SHARED VALUE APPROACH

## ABSTRACT

In 2011 the European Commission changed the definition and strategy for corporate social responsibility (CSR) with the creation of shared value as a core element of the new concept. In the same year Porter and Kramer published in the Harvard Business Review their approach of creating shared value (CSV) as a core element of long-term business strategies. The starting point of both approaches is the societal legitimation of enterprises to do business. The CSR respective CSV are evaluated to be a mean for reaching this legitimation and to further it to gain back the trust of the society that was lost during the financial crisis. This paper describes the two concepts and analyzes the similarities and differences. From the overall aim and intention, the EU concept has a wider focus and much higher requirements for enterprises. The European Commission assesses CSR as a measure for business to contribute to inclusive growth, employment and well-being of the society. Hence, companies have to take into account that economic, social and environmental targets further include ethical human rights and consumer concerns when developing their long-term business strategy. The CSV of Porter and Kramer also goes beyond the pure business case of CSR because CSV also is defined as a long-term measure which has to be integrated systematically into the strategic core business of companies. The Commission sees the shareholders as just one common group of a company's stakeholders and gives no preference to them. For Porter and Kramer the simultaneous creation of profit and societal value are decisive.

**Keywords:** Shared value creation, corporate social responsibility, European CSR policy

## 1. Introduction

What the various definitions one can find for corporate social responsibility (CSR) have in common is that most of them refer to the triple bottom line approach of Elkington (1997) that focuses on the simultaneous consideration of economic, environmental and social goals. Various stakeholder groups expect from companies to go beyond economic targets and include sustainability aims in their business strategy. Hereby business is confronted with partly contradictorily perceptions.

Due to the fact that enterprises have leeway in decision-making about their impact on the society and the environment, they are also held responsible for the results of their decisions. Ignoring the expected CSR obligations can lead to threats like e.g. image losses, negative reports in the media or customer boycotts with negative consequences for the economic performance. Hence it is also in the interest of shareholders that managers fulfill basic CSR targets at least in the sense of risk management (Calabrese et al., 2013: 51; Friedman, 1970: 177). On the other hand, companies can gain competitive advantages while fulfilling the environmental and social bottom line and thereby gain competitiveness.

In 2011 the European Commission changed the definition of corporate social responsibility (CSR). According to the new definition, the creation of shared value (CSV) is a core element for companies with their owners and shareholders respectively, as well as for other stakeholders and the society. The commission further evaluates strategic CSR as an important mean for the competitiveness of companies (European Commission, 2011: 3–4).

Also in 2011, Porter and Kramer published a paper in the Harvard Business Review with the title 'Creating Shared Value' (CSV). The authors point out the development of a new strategic business concept that is able to simultaneously create economic and societal value and increase the competitiveness of companies.

While the European Commission sees CSR as a driving concept, Porter and Kramer differentiate CSV from CSR. Hence the question about the common ground and differences of both concepts arises. This analysis further shows the consequences both approaches might have for the development of business strategies.

The paper proceeds as follows: Chapter 2 describes

the methodology. For analyzing both approaches, a content analysis is used. Core elements of both concepts are CSR respective CSV and stakeholders. Therefore chapter 3 gives a brief overview about CSR and stakeholder management. Chapter 4 describes the CSR concept of the EU from 2011. Chapter 5 introduces the CSV concept of Porter and Kramer. In chapter 6 the two approaches are compared and discussed. Here the main commonalities and differences are shown. In chapter 7 the paper ends with a discussion and raises open questions.

## 2. CSR and stakeholders

Carroll (1991: 43) points out: "There is a natural fit between the idea of corporate social responsibility and an organization's stakeholders." Nonetheless, he states the word social might be too vague and therefore it has to be specified to whom the enterprise is responsible. Hence the question occurs who are the stakeholders that the companies should aim at and how these stakeholders should be part of the companies' activities.

Hence, the CSR and the stakeholder theory are interconnected. While the CSR theory has the aim to define the responsibilities that the enterprises are expected to fulfill, the stakeholder theory address the social groups that companies are expected to take into account in their decisions (Jamali, 2008: 228).

In their literature review, Pelozo and Shang (2011: 120–121) found philanthropy to be the dominant motivation for CSR followed by the business case and mixed strategies.

The CSR can be a mean for companies to gain competitiveness (e.g. Husted and Allen, 2007: 598–599; Reefke and Trocchi, 2013: 806; Weber, 2008: 248–251). Competitiveness increase can evolve by:

- Positive effects on the image and reputation of a company,
- Increasing employee's motivation and intention, further advantages in the phase of recruitment,
- Access to capital of investors who are sensitive in respect of sustainable behavior,
- Cost savings and efficiency gains especially from the environmental bottom line, e.g. energy, water and/or waste savings,

- Gaining new customers through sustainable innovations,
- Increasing sales of green products.

Nevertheless, the results about the influence of CSR on firm performance during the last two decades of empirical research are mixed. All has been shown: positive, negative and no relationship (Husted and Allen, 2007: 595; Perrini et al., 2011: 60).

For Windsor (2013: 1940), there is the question of whether there is convincing evidence for a strong negative influence of CSR on financial performance in multiple cases. Otherwise, she argues, it would make sense to follow CSR aims. She concludes that companies can generate more wealth by taking into account CSR than by irresponsible behavior. Barnett and Salomon (2012) however argue that it depends on the capability of firms to capitalize their social responsibility costs of whether it pays for them to be good or not.

Consumer demand for CSR depends on several factors. It is mostly a phenomenon of developed countries and influenced by the country's economic stability. Furthermore, it increases with the educational, social and financial status of the individual person (Claydon, 2011: 415). The empirical research by Pelozo and Shang (2011: 126–127) shows that purchase decisions are mostly product related. Moreover, human responsibilities are a main purchasing factor. One study found that for customers, Carroll's four dimensions are relevant in descending order: the economic, philanthropic, legal and ethical orientation of companies and that these evaluations are influenced by culture; whereas another study found the ethical orientation as most relevant.

Within the scope of stakeholder management, a huge variety of divergent points of view have been expressed. Despite the fact that the importance of stakeholders can be traced back even to Adam Smith, the work of Freeman (1984) can be seen as the starting point for the ongoing discussions and developments in stakeholder theory (Ribeiro Soriano et al., 2011: 227).

Similar to the approaches of CSR, the inclusion or exclusion of stakeholder groups into strategic planning depends finally on the target function of the enterprise. Even if the overall aim still remains pure profit maximization - which is highly under discussion in theory and practice - it is necessary to identify the power and strategic importance of

stakeholders. It is shown in literature that powerful stakeholders are able to extract additional value and that strategically important stakeholders can create value for companies through reciprocity (Harrison and Bosse, 2013: 321). Various stakeholder theories to identify and manage stakeholders and their different interests have been developed (see e.g. the summary in O'Riordan and Fairbrass, 2014: 122–124).

Within the stakeholder theories, two main kinds of stakeholder groups are differentiated. Primary stakeholders with direct and contractual relationships with the enterprise, like shareholders, customers, employees and suppliers, regulators and secondary stakeholders with non-contractual ties, but who may affect or be affected by the enterprise (Pesqueux and Damak-Ayadi, 2005: 6). In the beginning stakeholder management was – comparable to the business case of CSR - seen as an instrument to gain economic success either directly through business transactions or indirectly by increasing trust, reputation, and cooperation or by reducing economic risk. The arguments given here are very similar to the business case of CSR. The focus shifted and today's secondary stakeholder groups like non-governmental organizations (NGOs), media and government are also important for enterprises. Hörisch et al. (2014: 329), referring to Freeman (1984: 25) and Freeman et al. (2010: 9), define therefore stakeholders "... as 'those groups and individuals who can affect or be affected' by the actions connected to value creation and trade."

Most kinds of normative stakeholder theories are based on the social relationship between enterprises and the respective community or society (Crane and Ruebottom, 2011: 79). Companies here have a moral duty towards their stakeholders (O'Riordan and Fairbrass, 2014: 123).

Freeman et al. (2007: 309–313) discuss the question of who in the competition of interests is the dominant group and go on describing the priorities different authors have. This is the state for Keynes, laborers for Marx, the rights of the management for Berle and Means and investors for Friedman. They develop six principles for capitalism, amongst them the principle of continuous creation of value in cooperation with stakeholders. "Business should be about the best that we can create together, rather than about avoiding the worst" (Freeman et al., 2007: 313). Hence enterprises should not focus on a dominant group. Rather they should include

mutual stakeholders' interests. Hörisch et al. (2014: 336–340) therefore propose a model of stakeholder interactions based on the value of sustainability.

A successful business strategy including CSR measures and stakeholders' involvement has to comprise transparency and an effective communication as core elements. According to their transparency attitude, Lahme and Klenk (2013: 158–159) differentiate three types of companies:

1. Companies just fulfilling their legal reporting obligations,
2. Followers who see transparency as important and who are partly transparent,
3. Convinced companies that integrate transparency into their business strategy and equity story and are already in an open dialog with their stakeholders.

For them most Dax-30 and Fortune-500 companies can be characterized as the second type. Within the EU one can find a high diversity between the CSR policies of the EU states. Leading regions are Scandinavia, the Anglo-Saxon region and Central Europe, while many Eastern European states have yet not developed national CSR strategies (Martinuzzi et al., 2011: 35–99).

All in all, one can conclude that literature is not giving a conclusive picture about the consequences of CSR and stakeholder measures for enterprises.

### 3. Methodology

A qualitative content analysis method is used. This method aims at the understanding of a text while analyzing the explicit and implicit content. The qualitative content analysis can be defined as a subjective interpretation of a text by a systematic classification and the identification of themes (Hsieh and Shannon, 2005: 1277). It is no standardized instrument and has to "...be fitted to suit the particular object or material in question and constructed especially for the issue at hand" (Mayring, 2014: 39). Therefore, it is important to work with a category system (Mayring, 2014: 40).

While analyzing both approaches of CSR it is necessary first of all to have a look at the motivation for introducing and, respectively, changing the view on CSR. The first category therefore is the "role

of business in society," to see how both concepts evaluate the societal importance of business. Then the prerequisites for CSR have to be explained. Next, one has to look at the aims which should be reached through CSR. It is further of importance to know which societal groups are addressed by CSR because the inclusion or exclusion of stakeholder groups is essential for the strategic focus of business. Definitely, strategic orientation is an important category because this is the basis of the requirements for business and shows the expectations the authors of both papers have about the business strategy and business behavior. Furthermore, these requirements are the parameters to evaluate business behavior. Moreover of interest is the division of functions between governments and business. Therefore, seven categories for analyzing the two texts are used:

- Role of business in society,
- Prerequisites for CSR,
- Aims,
- Stakeholders,
- Strategic orientation,
- Role of government.

In the first step the content of both concepts are analyzed separately. Then, the findings are compared to evaluate the common grounds and the differences of the approaches.

### 4. The CSR strategy of the European Commission

With the revised definition of CSR in 2011, the European Commission aims to achieve a highly competitive social market economy where companies significantly contribute to sustainable development and inclusive growth. It is part of the Europe 2020 strategy. Until 2011, the European Commission followed the definition of CSR as "... a concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis" (European Commission, 2011: 3). The core elements were 'voluntariness' and 'beyond compliance'.

In the renewed EU strategy the Commission underlines the importance of CSR. Voluntariness is

not mentioned any longer. Instead, the Commission expanded the scope of CSR to an integration of CSR into the core business of companies. The European Commission (2011: 3) does not differentiate between philanthropic and strategic CSR and describes the value of CSR for companies as follows: "A strategic approach to CSR is increasingly important to the competitiveness of enterprises. It can bring benefits in terms of risk management, cost savings, access to capital, customer relationships, human resource management, and innovation capacity." In cooperation with their stakeholders companies therefore should create a strategic management process that involves "... social, environmental, ethical human rights and consumer concerns." (European Commission, 2011: 6). Hence the aim of such processes is the maximization of shared value for all three target groups alike: shareholders, other stakeholders and the society. Further, companies should identify, prevent and mitigate their unfavorable impact on these target groups. With this new approach, the CSR has definitely a higher significance for business because it fully overlaps with the core business (Brunn et al., 2013: 6).

The compliance of applicable legislation as well as collective agreements between social partners are seen as prerequisites for CSR. The Commission request especially large companies with a more formal approach to CSR to follow international standards and guidelines. Here, the Commission refers to the OECD Guidelines for Multinational Enterprises, the ten principles of the United Nations Global Compact, the ISO 26000 Guidance Standard on Social Responsibility, the ILO Tripartite Declaration of Principles Concerning Multinational Enterprises and Social Policy, as well as the United Nations Guiding Principles on Business and Human Rights.

The Commission encourages companies to apply a long-term strategic CSR that contributes to societal wellbeing. Companies should develop innovative goods of higher quality and provide more productive jobs. The European Commission (2011: 7) describes the multidimensional nature of CSR and differentiates three areas of activities that companies should consider. The first includes four different topics which companies have to apply; therefore, these topics can be evaluated as core requirements, followed by the so-called further parts by cross-cutting issues.

1. Core requirements:
  - Human rights,
  - Labor and employment practices like training, diversity, gender equality and employee health and well-being,
  - Environmental issues like biodiversity, climate change, resource efficiency, life-cycle assessment and pollution prevention,
  - Combating bribery and corruption.
2. Further parts:
  - Community involvement and development,
  - Integration of disabled persons,
  - Consumer interests, including privacy.
3. Cross-cutting issues:
  - Promotion of social and environmental responsibility through the supply-chain,
  - Disclosure of non-financial information.

Furthermore, the European Commission (2011: 3–9) evaluates CSR as a basis for sustainability and an important contribution for businesses to build up long-term trust between them and important stakeholders like employees, consumers and citizens. The Commission points out that all organizations, businesses, governments and the EU itself, needs the trust of the citizens and argues further that the social consequences of the economic crisis have seriously lowered the trust in business. The public attention now focuses on sustainable and responsible business behavior as well as durable employment generation. The Commission diagnoses a gap between these expectations of citizens and their perceived business reality. The reason therefore is seen in the irresponsible behavior of some companies regarding environmental and social issues.

The European Commission (2011: 7) also defines the role of public authorities. Companies themselves are seen as the ones who should lead the development of long term CSR strategies supported by public authorities through a mix of regulations and voluntary policy measures, e.g. incentives for responsible business conduct. Public authorities should give enough flexibility to business to innovate and develop CSR strategies according to their specific circumstances. Concrete recommendations for activities are not given, which fits in with the approach of flexibility. Action plans and strategies are

part of the CSR public policies. According to Mulerat (2013: 16), the CSR policy framework can either be implicit, made up by institutions supporting CSR indirectly or explicit, consisting of institutions aiming at CSR. The latter are responsible for designing a strategic and consistent approach to CSR. Further, government contracting should follow new developed and implemented government procurement directives that include CSR measures of companies (Roberts and Markley, 2011: 2).

Summarizing one can state that the shared value concept of the European Commission goes far beyond the three sides of the triple bottom line of Elkington to which many definitions of CSR refer. But words like 'economic success', 'yield' or 'profit' are not even mentioned in the whole paper.

### 5. Porter's and Kramer's shared value concept

Likewise for Porter and Kramer (2011), the purpose of business has to be redefined. Instead of just focusing on profit, companies have to create shared value (CSV) by considering societal needs in their managerial strategy.

Porter and Kramer (2011: 63) are persuaded that their concept of CSV will lead to a major transformation in business thinking and that it "...will drive the next wave of innovation and productivity growth in the global economy. It will also reshape capitalism and its relationship to society. Perhaps most important of all, learning how to create shared value is our best chance to legitimize business again." (Porter and Kramer, 2011: 65).

Porter and Kramer (2011: 65–66) explicitly emphasize that their new concept is not social responsibility. They evaluate corporate social responsibility (CSR) initiatives as a reaction to the external pressure of stakeholders, as an instrument to improve the reputation of companies and state further companies would evaluate the costs involved as necessary expenses. For them the focus of this kind of CSR is a too narrow comprehension hence they differentiate CSV that focuses on both economic and societal yields.

The concept enjoys huge popularity in the business community. That might be the case because it was developed for and with senior managers of global players (Crane et al., 2014: 132). In 2014 the concept was a core topic at the World Economic Forum in

Davos (Ennes, 2014). Major global players like e.g. Nestlé, Wal-Mart or Coca-Cola are applying this concept under the consultancy of FSG (Porter and Kramer, 2011: 71), where Porter and Kramer are members of the Board of Directors.

The definition of CSV is clearly outlined. Both economic and social progress are quantified with value principles. Value itself is measured with the relation of benefits to costs; hence it follows the well-known definition of profit (revenues minus costs). Social enterprises should also aim at shared value, according to Porter and Kramer (2014: 71) a single aim, whether of social or of economic character, is not sufficient any longer.

Porter and Kramer (2011: 66–67) outline three ways of shared value creation:

#### 1. Reconceiving products and markets

In this field the authors differentiate between developed and developing countries. In developed countries they see new market opportunities for products and services that meet societal needs. Their examples include fundamental needs like better nutrition or housing as well as special products for the aging population. Moreover, due to the concentrated purchasing power, underserved markets in poor urban areas can deliver new business opportunities.

In developing countries they focus on the bottom of the pyramid. In this context, Porter and Kramer refer to Prahalad. Prahalad and Hammond (2002) pointed out the business opportunities for multinational companies (MNC) selling products to the poor in developing countries. They evaluate these markets on the one hand, as a source of growth for MNC themselves, on the other hand they state that, due to the increasing competition through MNC, the performance of these markets will increase. Hence, customers have advantages and enjoy higher quality products and/or better services than the ones delivered by international development agencies or national governments. The identification of societal needs, benefits and harm is seen as a prerequisite to develop products and markets for shared value.

#### 2. Redefining productivity in the value chain

Porter and Kramer refer to the correlation between societal problems and economic costs.

These are further fields for shared value creation. They explicitly name different issues "... natural resource and water use, health and safety, working conditions, and equal treatment in the workplace" (Porter and Kramer, 2011: 66–67). They state that even without governmental regulation or resource taxes externalities can create internal costs. For illustration they use the example of excess product packaging. They list different fields where environmental or social improvements serve both the company and the supply chain members.

#### 3. Enabling local cluster development

Companies have various relations to other companies, suppliers, service providers, institutions and the communities they are working in. Also, they depend on infrastructure. Porter and Kramer see a variety of options for value creation that only can be achieved in co-operation with these partners.

Government regulations, under certain conditions, are evaluated to stimulate shared value creation of business by focusing on measurable social improvement and by setting:

- clear and measurable social goals,
- resource prices reflecting the real costs,
- performance standards without specifying how to achieve them, because these are competitive parameters,
- phase-in periods for meeting standards,
- universal measurement and performance-reporting systems, where governments are providing the infrastructure for benchmarking data,
- efficient and timely result reports instead of detailed and expensive compliance reports,
- regulations against behaviors that benefit business at the expense of the society.

Government regulations therefore might have a positive impact on CSV but should not be too restrictive. Otherwise business might be delimited in the development of innovative and promising new CSV concepts.

### 6. Evaluation and comparison

- The European Commission's strategy

In the new strategy of the Commission, CSR and shared value creation becomes the main aim of business. The former approach of voluntariness disappeared. CSR is seen as an important tool to redefine the purpose and the legitimation of business in the society. The Commission goes with the new definition definitively beyond the triple bottom line approach. Besides economic, social and environmental goals, companies have to include ethical human rights and consumer concerns into their long-term strategy. That widens the scope significantly (Martinuzzi et al., 2011: 21).

Shareholders are just one of the groups of diverse stakeholders. They have no particular position. Arguments like the one of Smith (2007: 191) that economic success both in the short and in the long run is a prerequisite for all other activities of companies because it builds the indispensable basis for all other activities are not mentioned. Roberts and Markley (2011: 1) criticize the sight of the European Commission as follows: "In this definition, a company is not really a business but rather an agency administering the distribution of 'shared value' to its 'triple bottom line' constituencies."

Trust is an important element in the strategy of the Commission. They argue that business lost trust in the last economic crisis. According to Edelman's Trust Barometer (Edelman, 2014), globally people have more trust in NGOs (64% of the respondents) than in business (58% of the respondents). Trust in business in general is lower in developed than in developing countries and varies depending on industry sectors and the location of the headquarters. Nonetheless, business is in the second place in this survey whereas trust in media and especially in governments not only decreases but more than half of the respondents distrust their governments.

Roberts and Markley (2011: 3) remark "that private companies become 'responsible' only by meeting codes such as ISO 26000 and must be thrust into a quasi-governmental role in order to address challenges facing modern society. However, not only do companies already provide many valuable benefits to peoples and socie-

ties around the world, but the challenges facing modern society will be met only by effective and responsible government, a vibrant civil society, and a dynamic economy.”

- Porter's and Kramer's CSV

Pirson (2012: 32) points out that business in a broader sense always creates a shared value, and contractual relationships between companies and customers, suppliers and employee have to be beneficial for both sides; hence, “... the novelty of the argument [of Porter and Kramer] must lie in a substantial recalibration of social value and financial value creation.”

This is definitely the case in the approach of Porter and Kramer. They expect from all kinds of companies to integrate societal aims in their target function and their business strategy.

This evaluation is in line with Crane et al. (2014: 133) who critically analyze the concept of Porter and Kramer. They likewise highlight the fact that social goals are becoming elements of companies' strategic management. Furthermore they emphasize that Porter and Kramer are able to persuade both managers and scholars, with what they call the Porter effect.

Indeed this fact should not be underestimated. It is important that leading managers of global players as well as of small and medium companies discuss and apply CSR very seriously and beyond 'green washing' or 'window dressing', which is here defined in the understanding of e.g. Altenburger (2013: 2) where 'green washing' and 'window dressing' are CSR activities with a high public relation focus.

Moreover Crane et al. (2014: 133) emphasize the clear role that government has in this concept, and point out that the role of government normally gets little attention in CSR literature. As another advantage of the approach, they assess the attention Porter and Kramer give to the sustainable supply chain management. As weaknesses they evaluate the approach of Porter and Kramer to be unoriginal, to ignore the tensions between social and economic goals, to be naive about the challenges of business compliance and the CSV to be based on a shallow conception of the role of business in the society. It is remarkable that Crane et al. on the one hand favors

the supply chain argumentation of Porter and Kramer despite the fact that a huge literature on sustainable supply chain management literature already exists, while on the other hand, they criticize the originality of the approach. Without entering the discussion about originality, it is a merit of Porter and Kramer to bring CSV much closer to the business world.

Taking into account the examples Porter and Kramer (2011) list in their article, their understanding of CSV seems to correspond in some respects with strategic CSR. Strategic CSR can be located in between strict compliance of given rules and regulations and good corporate citizenship (Windsor, 2013: 1939). Nonetheless, CSV is going beyond the pure business case approach of CSR because it requires integrating CSV into the core business and the long term strategic alignment of companies. It seems that the combination of business success with either environmental or societal aims is sufficient for creating shared value in the sense of Porter and Kramer. Pfitzer, Bockstette, Stamp, (2013, 1), FSG colleagues of Porter and Kramer, speak about twin goals as the next competitive frontier.

- Comparison

The two approaches have in common that they both redefine the role of business in the society. Profit maximization alone is not any longer sufficient for the legitimization of business. The CSR, i.e. the CSV, is evaluated as a long-term measure which has to be integrated into the strategic core business alignment of companies. Shared value creation is a way to combine business success with societal benefits.

From the overall aim, the concept of the European Commission has a wider focus than the concept of Porter and Kramer. The core requirements of the European Commission are clearly specified. For the European Commission it is the task of business to contribute to inclusive growth and the well-being of the society. CSR is a way to fulfill this task. Shareholder value is integrated and builds one part of shared value creation. Obviously the interests of owners, other stakeholder and the society are evaluated equally (Roberts and Markley, 2011: 1).

Porter and Kramer recommend the application of strategic CSR where profit creation remains an important goal. A double bottom line of either economic and social or economic and environmental value creation is sufficient to reach their understanding of CSV.

The Nestlé case given by Porter and Kramer illustrates the general differences in the perspectives of the two approaches. The authors highlight the social progress in the value chain of Nestlé's Nespresso where the company has implemented various social benefits for their local coffee growers. “Nespresso combines a sophisticated espresso machine with single-cup aluminum capsules containing ground coffees from around the world. Offering quality and convenience, Nespresso has expanded the market for premium coffee” (Porter and Kramer, 2011: 69). It can be assumed that the environmental bottom line is not taken into account in this case, because aluminum capsules might have a higher negative environmental impact than paper pads or coffee filters.

When comparing several statements and elements of both approaches one finds a lot of similarities. Both concepts emphasize shared value as the most important element in the business strategy and the responsiveness of business for societal needs. Furthermore, the compliance of applicable legislation as well as collective agreements between social partners are prerequisites for CSR. Also, in common is the persuasion that creating shared value leads to competitive advances for companies. In this context, both approaches point out the importance of the creation of innovative goods of higher quality that serve societal needs.

Both concepts stress the significance of a sustainable supply chain that companies shall ensure. Also common is the emphasis on the impact enterprises have for the communities they are working in.

Porter and Kramer keep these issues more general but they ask for governmental regulation in cases where businesses benefit at the expense of the society. This demand definitely goes in line with the core requirements of the Commission. Moreover, both refer to the relation between business and government, i.e. public authorities, and see an important role for governments to

establish a supportive framework for CSR. Both concepts highlight that business needs flexibility for the development of sustainable innovations and strategies for creating shared value. Public authorities should therefore support business and not overregulate. The European Commission further stresses the responsibility of business for job creation and sustainable growth. For Porter and Kramer job creation and sustainable growth are results of CSV.

The biggest difference between the two approaches is the importance they give to profit. Porter and Kramer define the term creating shared value with the relation of benefits to costs. For them profit creation definitively is one main aim of companies. They should simultaneously focus on both profit and societal gains. This can be doubted for the approach of the EU. Profit creation is not even mentioned. Shareholders are one equal group amongst the many stakeholders companies have.

Both approaches estimate to a great extent that economic and societal aims can be reached simultaneously but ignore the established fact of conflicts in a multidimensional target function. It is the definitely the case that some CSR activities simultaneously serve economic and societal targets, while others don't. Husted and Allen (2007: 595) give in this context the example of General Motors that maintain pension commitments whereas their competitors do not have to fulfill such obligations. Several researchers on multiple objectives in the target function of companies show the problematics and impacts for involved managers (Pirson, 2012: 33). As pointed out in the introduction of this paper, it is well-known that there are not only conflicts between shareholders and other stakeholder groups but further trade-offs between the aims of different stakeholder groups themselves. Furthermore, agency conflicts can hardly be removed through governance by companies (see e.g. Crilly and Ioannou, 2014: 1).

The core contents of the two approaches are summarized in the following synopsis (see table 1). The structure follows the categories developed in the methodology.

**Table 1 Synopsis of both concepts**

Category	European Commission	Porter and Kramer
Role of business in society	CSR as core element for the legitimization of business	
Prerequisites	Companies fulfill their legal obligations Collective agreements between social partners	Companies fulfill their legal obligations
Aims	Contribution to inclusive growth and the well-being of the society  Triple bottom line	To reach simultaneously economic and social progress through value creation quantified by the relation of benefits to costs Double bottom line
Stakeholder	Shareholders Other stakeholders The whole society	Varies with the concrete projects
Strategic orientation	CSR/CSV is a long-term strategy and included in the core activities of business	
Role of government	No strict regulation but flexibility for business Government procurement directives can be used to enhance CSR	Governments should set clear and measurable social goals and performance standards Public authorities should support business and not overregulate

Source: Own compilation

### 7. Discussion and open questions

All in all, one can state that the common ground of both concepts is the redefinition of the role of business in society because they emphasize that doing business just for profit maximization is not a matter of course any longer. Profit alone is not sufficient any longer for the legitimization of business. Instead, shared value creation becomes the new target that business should aim at to regain and improve societal trust.

Despite the fact that the term 'creating shared value' is the core element of both approaches, they differ in the requirements companies have to fulfill for reaching this aim. The concept of the European Commission definitively has a wider scope than the concept of Porter and Kramer. Whereas the European Commission clearly goes beyond Elkington's triple bottom line, Porter and Kramer focus on the economic success and societal value creation that can be reached either by combining profit with social or with environmental aims or with both. Hence it seems that shared value in this sense can be created by fulfilling a double bottom line strategy.

The European Commission demands from business to contribute to inclusive growth and the well-being of the society by including CSR in the long-term business strategy. It seems that the role of companies here change to a quasi-governmental one. One can have the impression companies are seen as actors who are also held responsible to bridge societal governance gaps. Profit is not even mentioned in the EU approach whereas for Porter and Kramer profit remains a major aim of business.

Both concepts neglect the well-known problematics resulting from multidimensional target functions and from different stakeholder groups with contradictory aims. These topics are not mentioned in both papers and therefore one cannot find any hint how the authors expect enterprises to handle them.

Moreover, until now, both concepts have had no binding character. Therefore, the main question arises, how far business will follow the changed impact that the EU Commission give to CSR. For Porter's and Kramer's CSV approach one can see a high acceptance especially by multinational companies. Nonetheless, till now one cannot speak about

a change in the paradigm of management. Further research is necessary to analyze empirically how far both concepts are implemented by enterprises and which consequences such implementations have for business. Another field of research is related to the impact CSR driven government procurement direc-

tives will have on the CSR activities. Governments of the EU countries have to provide EU wide and different approaches to CSR in their procurement strategies, as these might have consequences for the competition inside the EU.

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Regina Moczadlo

## STVARANJE KONKURENTSKE PREDNOSTI - EUROPSKA STRATEGIJA DRUŠTVENO ODGOVORNOGA POSLOVANJA U USPOREDBI S PORTEROVIM I KRAMEROVIM KONCEPTOM ZAJEDNIČKE VRIJEDNOSTI

### SAŽETAK

2011. godine Europska komisija izmijenila je definiciju i strategiju društveno odgovornoga poslovanja (corporate social responsibility - CSR) stvaranjem zajedničke vrijednosti kao osnovnog elementa novog koncepta. Iste su godine Porter i Kramer, u časopisu Harvard Business Review, objavili svoj koncept stvaranja zajedničke vrijednosti (creating shared value - CSV) kao osnovni element dugoročnih poslovnih strategija. Oba pristupa polaze od društvene opravdanosti poslovanja poduzeća. CSR, odnosno CSV, smatra se sredstvom za postizanje opravdanosti poslovanja i vraćanja povjerenja društva koje je izgubljeno tijekom financijske krize. U ovome radu opisuju se dva koncepta i analiziraju njihove sličnosti i razlike. S obzirom na opći cilj i svrhu, koncept EU-a obuhvatniji je i zahtjevniji u odnosu na poduzeća. Europska komisija ocjenjuje CSR kao mjeru kojom se poslovanjem pridonosi uključivom rastu, zapošljavanju i dobrobiti društva. Poduzeća pri izradi dugoročne poslovne strategije moraju uzeti u obzir gospodarske, društvene i ekološke ciljeve te uključiti pitanja koja se tiču etike poslovanja, ljudskih prava i potrošača. Porterov i Kramerov koncept CSV-a ide i dalje od čistog poslovnog slučaja CSR-a jer je po svojoj definiciji CSV dugoročna mjera koju treba sustavno integrirati u stratešku osnovnu djelatnost poduzeća. Europska komisija smatra vlasnike poslovnog udjela samo jednom zajedničkom skupinom dionika poduzeća i ne daje im nikakvu prednost. Prema Porteru i Krameru presudno je istodobno stvaranje dobiti i društvene vrijednosti.

**Ključne riječi:** stvaranje zajedničke vrijednosti, društveno odgovorno poslovanje, europska politika društveno odgovornoga poslovanja

Sabina Đonlagić  
University of Tuzla  
Faculty of Economics  
Univerzitetska 9,  
75000 Tuzla, Bosnia and Herzegovina  
sabina.djonlagic@untz.ba  
Phone: +38762246534

Amra Nuhanović  
University of Tuzla  
Faculty of Economics  
Univerzitetska 9,  
75000 Tuzla, Bosnia and Herzegovina  
amra.nuhanovic@untz.ba  
Phone: +38761300929

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Samira Fazlić  
University of Tuzla  
Faculty of Economics  
Univerzitetska 9,  
75000 Tuzla, Bosnia and Herzegovina  
samira.fazlic@untz.ba  
Phone: +38761800889

## INTRODUCING A FRAMEWORK FOR KNOWLEDGE ECONOMY DEVELOPMENT IN TRANSITION COUNTRIES: THE CASE OF BOSNIA AND HERZEGOVINA

### ABSTRACT

In the context of the current socio-economic situation in Bosnia and Herzegovina as well as its medium-term aspirations to join the European Union, a question arises as to whether and to what extent Bosnia and Herzegovina responds to set demands related to the creation of a knowledge society and knowledge economy, which should lead to its economy's competitiveness. Bosnia and Herzegovina has been in the transition period for almost two decades. Its current socio-economic situation is urging academics, policy makers and other relevant bodies to address these problems. A shift towards new drivers of economic growth is necessary. In this paper we will identify the key drivers and explore the readiness of Bosnia and Herzegovina to develop a new economy - a knowledge economy. Results which have been presented in this paper are based on data which has been collected from the sample of 143 medium and large enterprises in Bosnia and Herzegovina. The factor analysis results indicated relevance of the six main drivers of knowledge economy development. The findings confirm the relevance of the conceptual framework for assessing readiness of countries in developing a knowledge economy. The main contribution of the paper is the empirical validation of the conceptual framework related to the knowledge based economic development of a transitional country. The identification of key drivers for knowledge economy development is relevant to governments and other policy makers involved in developing and implementing strategies for economic development in Bosnia and Herzegovina as well as the academic community and higher education institutions which are key institutions in knowledge creation and diffusion.

**Keywords:** Knowledge economy, model for knowledge economy development, transition country, Bosnia and Herzegovina

## 1. Knowledge economy and transition countries – preliminary research

Piech (2006) concluded that after the post-social transformation in transition countries the issues of development, growth and a knowledge economy have been in the focus of transition economies. He also presented specific aspects of the knowledge economy in EU transition countries focusing on human capital and innovation. Piech concluded that governments in transition countries need to focus more on education, enhancement of the innovation system and investments stimulating domestic activity in order to absorb technologies and knowledge. Transition countries are urged to build new competitive factors and by developing a knowledge economy new possibilities are created. Veugelers (2011) assessed the potential for knowledge economy development in transition countries. According to the findings of this research it is important for transition countries to identify the potential for future knowledge-based growth. Transition countries have undergone both economic and political changes and specific transition process patterns strongly influence these countries' overall development with implications for knowledge based growth.

Veugelers's analysis of prerequisites for a knowledge economy indicates that these countries have systemic disadvantages which are producing obstacles for knowledge economy development. Based on the results of the analysis, the conclusion was drawn that transition countries do not have highly developed innovation systems, they lack the capability to develop frontier technologies, and there is a low level of R&D. Actually, Bosnia and Herzegovina was identified as a country with low scores of innovation action and a country which failed on potential for knowledge-based growth in the near future.

Furthermore, according to Rodrigues (2002), globalisation has urged nations to compete to attract investment depending on general business competitiveness conditions. These conditions are tied to a greater amount of knowledge as a main source of wealth of nations. This is of great importance for transition economies, which are competing for attracting foreign investments in order to generate growth.

Based on the results of prior research, we can conclude that rather than to evaluate innovation capabilities of transition countries it would make

more sense to assess the potential for knowledge based growth in transition countries based on a broader framework. This has been confirmed by Dyker and Radosevic (2000) who concluded that even though conventional predominantly macro-economic transition policies have to a large extent created conditions for building knowledge economies in transition countries, a different approach will be necessary for such an evolution. The only way transition countries will be able to develop institutional diversity and required learning networks and thereby catch up with developed western countries is by developing all sectors crucial for a knowledge economy.

## 2. Knowledge economy framework

Traditional production factors are of the same importance in this country as the effective and efficient application of knowledge. Knowledge application is an additional factor of productivity, and it is essential for the implementation of economic development goals. Both theory and practice have indicated a positive correlation between the level of knowledge created by countries, its usage and the economic development, especially in transition countries.

Although some authors have different views on this concept, they all emphasize the importance of new knowledge and observe it from different angles. Common to all these attitudes is the importance of knowledge for modern economic development. Therefore, it is important to recognize that all economic activities are based on some form of knowledge, not only in developed countries but also in all forms of human activity and societies. The presumption of all the mentioned theories and arguments is the thought that advances in education and technology research development have a key role in today's economic growth, especially in those countries with limited natural resources. However, it is necessary to take into account the disadvantages that are related to the development of the knowledge economy. It not only leads to faster economic growth, but also to significant social changes, such as migration from rural to urban areas and others.

In earlier years it was thought that changes occur only in producing and providing services, but today it is proven that knowledge affects every element of

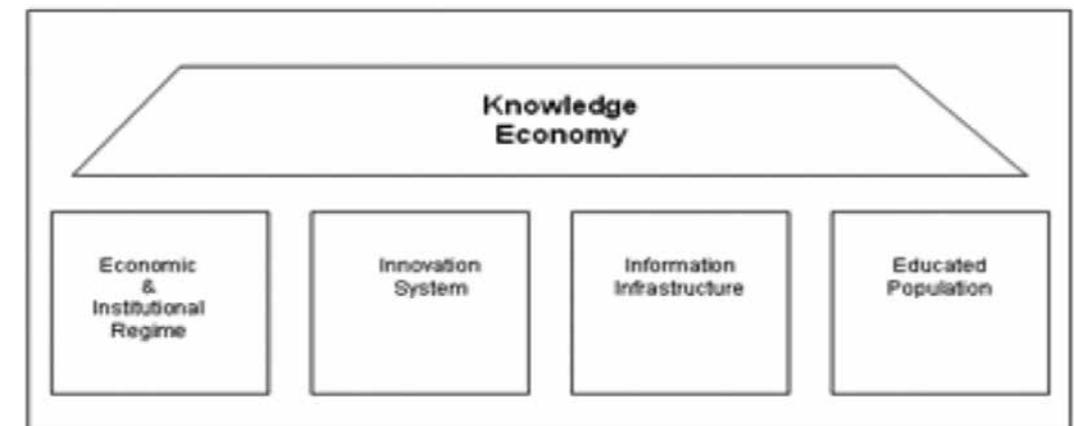
the economy and society. The speed at which the development of new knowledge and technology are presented to the market changes the way of interactions and operations, increasing efficiency and flexibility in business, providing public services and lifestyle. However, authors also emphasize that the revolution of knowledge can lead to greater differences in incomes of individuals and the development of most urban areas, whereas rural areas that rely on agriculture and other rural activities are becoming increasingly marginalized. There is also a possibility of creating a gap between those with higher and lower levels of education, which can lead to further fragmentation of society and the decline in the living standards of individuals with lower qualifications.

However, despite some negative social consequences of developing a knowledge economy (e.g. gap among workers with lower education levels and those with higher qualifications, gap between rural and urban communities etc.), from the economic point of view it can significantly contribute to the initiation of economic development of a country.

However, a question arises how to create and measure the development of a knowledge economy? Measuring the development of a knowledge economy is a complex issue, because it involves changes in many aspects of the economy (as well as the society). The World Bank has presented a framework with indicators that can be used for measuring the knowledge economy, taking into account the specifics of each individual economy. The main aim of this framework is to help developing and transition economies to build their capacity and use of knowledge in order to strengthen their competitiveness and increase their economic and social well-being. According to the mentioned framework, the four main pillars of a knowledge economy are:

1. *Economic incentive and institutional regime* which provide adequate economic policies and institutional infrastructure for enhancement and stimulation of knowledge creation, dissemination and utilization,
2. *Educated and skilled workers* with adequate skills and knowledge,
3. *Innovation system* which is effective and based on strong ties between academy and industry especially in R&D activities,
4. *Application and infrastructure for ICT* needed for communication, dissemination and processing of information and knowledge.

Figure 1 The Knowledge Economy Framework



The Knowledge Economy framework

Source: Available at: <http://data.worldbank.org/data-catalog/KEI> (Accessed on: March 13, 2015)

This framework asserts that investing in the mentioned knowledge economy pillars is necessary for the creation, adoption and utilization of knowledge in an economy. All of these pillars are important determinants for long-term economic growth, therefore, a country cannot develop only one of these pillars in order to create a knowledge economy. All of the four pillars need to be developed equally as they are all crucial for knowledge economy development. This requires long-term strategies for coping with the transition towards a knowledge economy.

In order to facilitate this process, adequate measures need to be developed for assessing the progress in the development of a knowledge economy. For example, the World Bank developed a *Knowledge Assessment methodology (KAM)* for countries to assess their readiness for knowledge economy development. Given that the purpose of measuring the knowledge economy is to determine progress in each economy or region, these indicators can serve as useful benchmark indicators which allow comparison but do not represent absolute measures. When it comes to Bosnia and Herzegovina, these indicators can have an important role in convincing those responsible to create policies that will provide the development of the knowledge economy as the potential alternatives for diversifying the economy.

A framework for the development of a knowledge economy is specific for each country because it reflects the specific socio-economic goals of development. Regardless of the specifics of each country's effective governance, modern education system, effective information and communication technology, infrastructure, services and research institutions, development and innovation are fundamental prerequisites of development strategies of the knowledge economy, especially in countries such as Bosnia and Herzegovina. However, applying a unique model for the evaluation and improvement of development capabilities is not possible. It is necessary to take into account the specificities of each country to understand the key determinants that can generate growth and progress. The development of a knowledge economy is a long-term process that involves the creation of new socio-economic values that enable dynamical changes, through the promotion of productivity, innovation and lifelong learning.

Most of the frameworks for the development of a knowledge economy can be adapted to the specificities of each country given that countries are at different levels of socio-economic development.

Regardless of those specifics, effective government institutions, a developed educational system, which educates individuals in accordance with the needs of the economy, effective information and communication technology and infrastructure are key prerequisites for the development of strategies and for the development of a knowledge economy, especially in countries which are in transition.

### 3. Developing a knowledge economy in transition countries: a framework for Bosnia and Herzegovina – empirical research

In the context of the current socio-economic situation in Bosnia and Herzegovina as well as its medium-term aspirations to join the European Union, a question arises as to whether and to what extent Bosnia and Herzegovina responds to the set demands related to the creation of a knowledge society and knowledge economy, which should lead to its economy's competitiveness. Taking into consideration its current economic situation, a long period of transition, the trends in macroeconomic indicators in the past few years; it is evident that we should be looking for a new foundation for economic growth and development. In this research we will try to identify key knowledge economy drivers for knowledge economy development in Bosnia and Herzegovina?

#### 3.1 Methodology of the primary research

In order to introduce a framework based on key drivers for the development of a knowledge economy in Bosnia and Herzegovina, taking into account the specifics of the country, an empirical research was conducted aiming to provide the answer to our research question. The research was conducted based on a questionnaire survey targeting medium and large enterprises in Bosnia and Herzegovina.

For the purposes of this study, four independent variables have been identified – drivers of the knowledge economy. The results/outcomes of knowledge (knowledge economy) have been identified as the dependent variable in this study.

Table 1 The structure of the sample

Number of Employees	Frequency	%
50-100	70	48.95
101-250	48	33.57
251-300	16	11.19
301-400	6	4.19
401 and more	3	2,10
TOTAL	143	100.0

Source: Authors' research

From 1 520 companies which have been identified as the population based on the size of the enterprise defined by the number of employees, based on probability, sampling the sample size has been determined at 150 enterprises. Due to the fact that the number of employees is recognized as the valid criteria for classification of enterprises by size, the structure of the sample in accordance with the number of employees in enterprises included in the research is shown in Table 1. As explained, 150 questionnaires were distributed and the response rate was 95.33% (n = 143).

#### 3.2 Results of the research and discussion of results

Data analysis was performed using factor analysis. The analysis of the knowledge economy's main components included 54 variables. As a reference for the selection of factors, a characteristic value was used (Eigen value) which is higher than 1.00 and Scree plot diagram. On the basis of that, initially 16 factors were identified with a characteristic value higher than 1.00 after 25 iterations. Identified factors explain 78.64% of the variance. Namely, significant factors are only the factors that meet the following conditions: - their Eigen values (characteristic values) must be higher than 1, the percentage of the total variance higher or equal to 0.60 (in social studies), the significance of the factor coefficients higher or equal to 0.50.

Table 2 Results of KMO and Bartlett's test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.602
Bartlett's Test of Sphericity	$\chi^2$	6298.931
	df	1485
	Sig.	0.000

Source: Authors' research

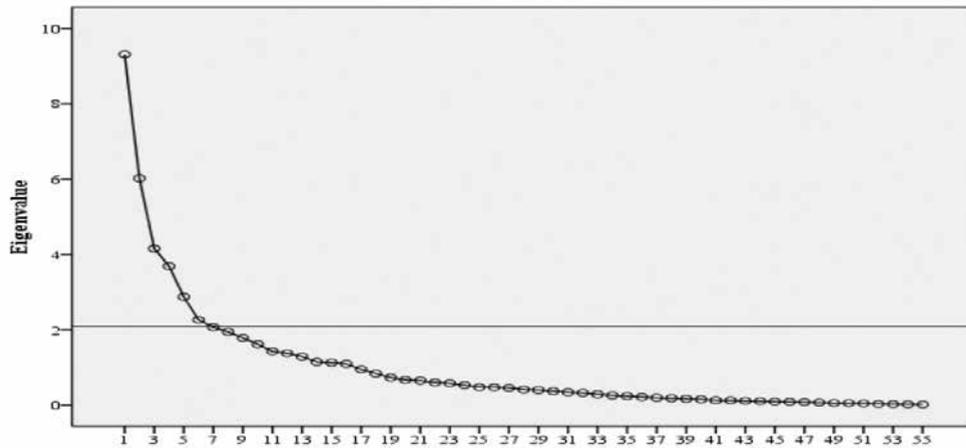
According to values of measures presented in the table above, it can be concluded that it was appropriate to apply factor analysis in this research. The KMO test shows the benefits of applying factor analysis and its value varies in the range from 0 to 1. If the value of the KMO test is in the range of 0.5 to 1, as we have already noted, there is a justification of the application of factor analysis. Since the Kaiser-Meyer-Olkin measure in our case is 0.602, we can conclude that the data used in variables are suitable for conducting a factor analysis, while Bartlett's test is statistically significant with a value of  $\chi^2 = 6298,931$ ,  $p = 0.0001$ ,  $df = 1485$ .

After nine reductions, we obtained six factors that meet all the criteria and accounted for 51.52% of the variance. These factors have a common factor weight in the value of 28 (Eigen value). The scree plot test also confirms that the solution with six factors is appropriate.

The analysis of the main components revealed the presence of 16 components with characteristic values over 1.00, which explains 78.64% of the total variance. Based on the scree plot criteria which is based on Cattell's diagram the existence of the turning point behind the 6<sup>th</sup> factor can be identified, which confirms the separation of six factors, because their Eigen values are separated from the Eigen values of the remaining factors. Solution with six factors explained 51.52% of the variance, where the participation of the first factor is 16.9%, the second is 10.95%, the third is 7.57%, the fourth 6.72%, the fifth 5.2% and the sixth is 4.12%

According to Živadinović (2004) the initial matrix does not have the characteristics of the simple structure; the rotation factor is carried out, which changes the relationship between variables and factors. In this study, after the extraction of factors, the orthogonal rotation of factors 35 was performed (where the factor axes retained a right angle) using

Figure 1 Scree plot diagram of input factors of the economy knowledge (independent variables)



Source: Authors' research

the “varimax rotation with Kaiser normalization”, whose goal is that each variable must be representative with as few factors as possible and with better geographic dispersion. This method, compared to other methods of rotation, was more successful in achieving the principles of a simple structure (Živadinović, 2004: 961).

The Factor analysis solution extracted the following factors according to their importance with the following surrogate names:

- University education and development of the higher education system,
- Government regulation and environment,
- Utilization of ICT and infrastructure,
- Investment in R&D,
- Employee education and training,
- R&D activities and innovation.

It is evident that the role of higher education is recognized as a key factor for the creation of new knowledge and its “spillover” in the economy. Secondly, we identified the factor related to the role of their government indicating its relevance for creating a regulatory environment which is important for creating the knowledge economy.

The ICT, infrastructure and services are important for enhancing productivity and acquisition of knowledge. R&D capabilities and investments in R&D are important in order to enhance the innovation and creation of new products, technologies, processes and new knowledge in general. But, on the whole, human resources and education and training of employees is important in order to enable them to acquire skills and knowledge which is applicable.

After the main inputs/drivers of a knowledge economy were identified, we approached the determination of results (outputs) regarding the knowledge economy by the same criteria as in the case of drivers of the knowledge economy. In case of knowledge economy outcome, the KMO is 0.884, Bartlett's test is highly statistically significant and is  $\chi^2 = 951,181$  with statistical significance  $p = 0.0001$  and degrees of freedom  $df = 78$  confirmed justification of approaching to the use of main components of factor analysis.

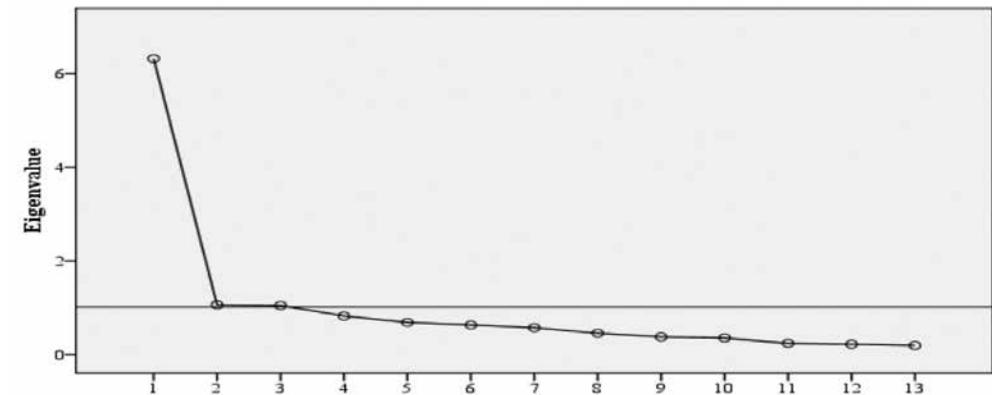
Table 3 Results of the KMO and Bartlett's test (results of the knowledge economy)

The Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.884
Bartlett's Test of Sphericity	$\chi^2$	951.181
	df	78
	Sig.	.000

Source: Author's research

After two iterations, two factors were identified which accounted for 56.75% of the variance, which is acceptable to criteria.

Figure 2 Scree plot diagram of the results of knowledge economy (dependent variable)



Source: Authors' research

The factor analysis extracted the following factors according to their importance with the following surrogate names:

- Productivity (performance),
- Acquisition of new knowledge.

The key outcomes of the knowledge economy and productivity have been identified as a result of applying new technologies and knowledge, and the creation of new knowledge and its utilization for improvement of processes as well as R&D activities.

#### 4. Limitations to the research

Like any research, our conclusions based on the results of our empirical research have some limiting factors. As we presented in the theoretical background of our research, the term knowledge economy is a relatively new phenomenon, especially when it comes to research on knowledge economy development in transition countries. Our research was conducted on a sample of medium and large enterprises only and these results could be used as a foundation for a wider research which will be conducted on a larger sample that would include enterprises of all sizes from all sectors. In our empirical research, we have chosen input factors which we found to be suitable for Bosnia and Herzegovina and therefore this framework does not represent a universally applicable framework due to the fact that these input factors might not be suitable for other transition countries due to their economic or social specifics.

#### 5. Conclusions and recommendations

Modern socio-economic developments in the past two centuries have led to the need of identifying new ways of achieving economic growth, development, competitiveness of companies and economies. Knowledge in this context has become an important resource for achieving the mentioned goals, regardless of some critical views of the economic theorists on creation of society and knowledge economy. This “new economy based on knowledge” represents the concept in which knowledge becomes the main production factor. However, this

economy implies fundamental changes in the concept of achieving economic growth, changes in economic and other policies, all the way to the changes at the organizational level and changes within enterprises, universities etc.

We identified six key factors based on the results of the factor analysis and they are considered to be key drivers of knowledge economy development in Bosnia and Herzegovina as a transition country. Even though the World Bank introduced a universal framework for knowledge economy development based on four main knowledge economy drivers, based on the results of our primary research we identified key knowledge economy factors and introduced a framework based on these six knowledge economy drivers, taking into consideration the specifics of Bosnia and Herzegovina as a transition country. These factors are: university education and development of the higher education system, government regulation and environment, utilization of the ICT and infrastructure, investment in R&D, employee education and training, R&D activities and innovation. Based on the research results we also identified key knowledge economy outcomes as the key drivers, which contribute to the acquisition of new knowledge and increased productivity. These drivers must be developed if Bosnia and Herzegovina wants to make the transition to a knowledge economy. Furthermore, we have been able to contribute to scientific knowledge related to the identification of key knowledge economy drivers

and knowledge economy development in transition countries.

A primary importance of education was pointed out, especially higher education, which allows the creation of new knowledge through collaboration with industry and the use of that knowledge in order to increase productivity. Of course, the role of the state in this context is not to be questioned and is very important since it is necessary to create the framework conditions for the development of the knowledge economy through regulations, policies, etc. Furthermore, innovation and R&D are also important driving factors of the knowledge economy and they are directly associated with other factors. The ICT, infrastructure and the development of the highly productive ICT sector in Bosnia and Herzegovina will allow an adequate development of the knowledge economy. However, it cannot be forgotten that in a knowledge economy an individual who possesses the knowledge and skills is crucial. Therefore, the interaction of three key players - government, education and business - is the key precondition for development of the knowledge economy. In this context, it is necessary to develop a system which will in its core focus on the creation, acquisition and utilization of new knowledge - the knowledge economy - based on the key drivers identified in this research in order to achieve productivity and competitiveness as key outcomes of a knowledge economy.

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Sabina Donlagić  
Samira Fazlić  
Amra Nuhanović

## UVOĐENJE OKVIRA ZA RAZVOJ EKONOMIJE ZNANJA U TRANZICIJSKIM ZEMLJAMA: SLUČAJ BOSNE I HERCEGOVINE

### SAŽETAK

U kontekstu trenutačne društveno-ekonomske situacije u Bosni i Hercegovini, kao i njezine srednjoročne težnje pristupanju Europskoj uniji, postavlja se pitanje udovoljava li i u kojoj mjeri Bosna i Hercegovina postavljenim zahtjevima koji se odnose na stvaranje društva znanja i ekonomije znanja, što bi gospodarstvo te zemlje učinilo konkurentnim. Tranzicijsko razdoblje u Bosni i Hercegovini traje gotovo dva desetljeća. Trenutačna društveno-ekonomska situacija nameće potrebu rješavanja tih problema i to s razine akademske zajednice, donositelja politika i drugih relevantnih tijela. Potreban je zaokret prema novim pokretačima gospodarskoga rasta. U ovome radu identificiraju se ključni pokretači i istražuje spremnost Bosne i Hercegovine za razvoj nove ekonomije - ekonomije znanja. Rezultati prikazani u ovome radu temelje se na podacima prikupljenima na uzorku od 143 srednja i velika poduzeća u Bosni i Hercegovini. Rezultati faktorske analize pokazuju relevantnost šest glavnih pokretača razvoja ekonomije znanja. Rezultati potvrđuju važnost konceptualnoga okvira za procjenu spremnosti zemalja na razvoj ekonomije znanja. Glavni doprinos ovoga rada je empirijska validacija konceptualnoga okvira koji se odnosi na razvoj ekonomije temeljen na znanju u tranzicijskoj zemlji. Identifikacija ključnih pokretača razvoja ekonomije znanja važna je za vlade i druge donositelje politika uključene u izradu i provedbu strategija ekonomskoga razvoja u Bosni i Hercegovini, kao i akademsku zajednicu i visokoškolske ustanove koje su ključne u stvaranju i širenju znanja.

**Ključne riječi:** ekonomija znanja, model razvoja ekonomije znanja, tranzicijska zemlja, Bosna i Hercegovina

## CONFERENCE REVIEWS PRIKAZI KONFERENCIJA

**Jelena Franjković:**

*Prikaz Erasmus međunarodnog tjedna  
Savonia Sveučilište primijenjenih znanosti - Međunarodni tjedan 2015*

**Anita Frajman Ivković:**

*Europski EFOS tjedan 6. – 8. svibnja 2015.: Tvoja mogućnost za budućnost*

**Nives Tomašević:**

*Kreativna riznica: Popularizacijski simpozij kulturne  
i kreativne industrije Ekonomskog fakulteta u Osijeku*

**Jelena Franjković**  
Josip Juraj Strossmayer University of Osijek  
Faculty of Economics in Osijek  
Trg Ljudevita Gaja 7,  
31000 Osijek, Croatia  
jelenaf@efos.hr  
Phone: +385912244062



## PRIKAZ ERASMUS MEĐUNARODNOG TJEDNA

*Savonia Sveučilište primijenjenih znanosti - Međunarodni tjedan 2015*

Sveučilište primijenjenih znanosti Savonia drugu godinu zaredom organiziralo je Međunarodni tjedan koji se održao od 9. do 13. veljače 2015. u Kuopiu u Finskoj. Iako je prošle godine Međunarodni tjedan uključivao samo nastavnike i studente s područja socijalnih usluga i zdravstvene njege, ove je godine proširen na gotovo sva područja kojima se bavi Sveučilište Savonia – turizam i ugostiteljstvo, poslovna ekonomija, socijalna i zdravstvena skrb, ruralne industrije, inženjerstvo i tehnologija, dizajn te glazba i ples. Sveučilište Savonia jedno je od najvećih sveučilišta u Finskoj s oko 5800 studenata i 470 nastavnika. Smješteno je u središnjoj Finskoj, a djeluje u tri grada međusobno udaljena stotinjak kilometara: Kuopio, koji je najveći grad te najbrojniji po broju studenata i osoblja, Iisalmi i Varkaus. Kako su i sami naveli, svrha njihovoga sveučilišta, kao sveučilišta primijenjenih znanosti, jest razvoj regije u kojoj djeluju i u tome uvelike uspjevaju, a finska ekonomija temelji se na efektivnom iskorištenju inovacija za koje su, između ostalih, upravo i oni zaduženi.

Pedesetak sudionika Međunarodnoga tjedna bili su studenti preddiplomskih, diplomskih i poslijediplomskih studija, nastavnici i osoblje iz ureda za međunarodnu suradnju, a pristigli su iz brojnih europskih zemalja poput Belgije, Bugarske, Češke, Estonije, Francuske, Hrvatske, Kosova, Litve, Nizozemske, Njemačke, Poljske, Rumunjske,

Slovenije, Švicarske, Turske, Ujedinjenog Kraljevstva, ali i iz nekoliko afričkih zemalja s kojima Savonia ima višegodišnju suradnju.

Službeni dio Međunarodnoga tjedna održavao se većinom u dva kampusa u Kuopiu, Opistotie i Microkatu. Microkatu je novi kompleks, izgrađen prije nekoliko godina, velikim dijelom financijskim sredstvima iz fondova Europske unije, a opremljen je vrhunskom opremom koja studentima i nastavnicima pruža odlične uvjete za praktično učenje iz raznih područja. U pauzama između predavanja i radionica bili su organizirani svojevrsni „turistički obilasci“ u kojima su glavnu ulogu imali studenti koji su sudionike entuzijastično provodili kroz kampus, pokazujući sve mogućnosti koje nudi i demonstrirajući što i kako oni praktično uče. Naglasak na predavanjima i radionicama bio je na područjima koji su u prioritetu istraživanja Savonie u sljedećih nekoliko godina, a to su bili: poljoprivreda i hrana - restrukturiranje lanca prehrane; integrirani razvoj proizvoda; usluge zdravstvene i socijalne skrbi orijentirane na korisnika te energija, okoliš i sigurnost. Veliki dio vremena organizatori su posvetili prezentiranju vlastitih uspješnih primjera i njihovoga pristupa učenju otvorenog inovacijama, poput Oivalle – virtualnog grada kojeg su kreirali i u kojem se studenti susreću s velikim brojem izazova koji ih čekaju u stvarnome poslovanju.

Kao i većina Finske, i sam Kuopio okružen je brojnim jezerima i šumama. Finci su uvelike povezani s prirodom i vrlo su ponosni na prirodna bogatstva koja imaju. Organizatori su goste upoznali s njihovim uobičajenim društvenim životom i tradicionalnom hranom. Organiziran je posjet najvećoj prirodnoj parnoj sauni na svijetu, Jätkänämpä, na-

kon koje su se oni hrabriji mogli okupati u ledenom jezeru i iskusiti prave čari Finske. Završna večer održana je u Puijo tornju, tornju za skijaške skokove i prepoznatljivom simbolu Kuopia s kojeg se pruža predivan pogled na cijeli grad te jezera i otočiće koji ga okružuju.

Anita Frajman Ivković  
Josip Juraj Strossmayer University of Osijek  
Faculty of Economics in Osijek  
Trg Ljudevita Gaja 7,  
31000 Osijek, Croatia  
afrajman@efos.hr  
Phone: +385912244095

## EUROPSKI EFOS TJEDAN 6. – 8. SVIBNJA 2015.

### *Tvoja mogućnost za budućnost*

Na Ekonomskom fakultetu u Osijeku od 6. do 8. svibnja 2015. godine obilježen je Europski EFOS tjedan povodom Dana Europe 9. svibnja. Događanje pod sloganom „Tvoja mogućnost za budućnost“ pružilo je sudionicima pregršt konkretnih informacija o Europskoj uniji i mogućnostima koje ona nudi. Sva predavanja, radionice i tribine bile su besplatne i nagradnog karaktera. Organizator projekta bio je Ekonomski fakultet u Osijeku s brojnim partnerima i sponzorima, a predsjednica Programskoga odbora doc. dr. sc. Anita Frajman Ivković istaknula je kako je preko 40 volontera tri mjeseca aktivno radilo na pripremi događanja te kako su upravo studenti bili u samom središtu događanja (kao voditelji, moderatori, organizacijski odbor, i sl.).

Tijekom svečanoga otvorenja, kojeg je uveličala izvedba Kulturno umjetničkog društva „Osijek 1862“, posjetiteljima su se obratili brojni važni sudionici koji su svi bili i aktivni sudionici barem jednog od događanja koje je uslijedilo. Važno je napomenuti kako je gospodin Branko Baričević (voditelj Predstavništva Europske komisije u Hrvatskoj) otvorio EFOS EU kutak, koji je jedan od članka Sporazuma o uspostavljanju i razvijanju znanstveno-razvojne i stručne suradnje potpisanog tom prigodom između Regionalne razvojne agencije (dr. sc. Stjepan Ribić) i Ekonomskoga fakulteta u Osijeku (prof. dr. sc. Vladimir Cini). Publikacije EU-a će tijekom godine biti dostupne u EFOS EU kutku zahvaljujući Informacijskom centru Europe Direct, a brigu u kutku vodit će Knjižnica EFOS-a koja je također partner događanja te koja je tom prigodom organizirala izložbu EU korner (<http://www.efos.unios.hr/efos-eu-kutak/>).

Više informacija o EFOS EU kutku dostupno je na <http://www.efos.unios.hr/knjiznica/europski-kutak/>.

Europski EFOS tjedan započeo je okruglim stolom naziva „Unija predrasuda“ kojeg je moderirao Daniel Čehajić, a na kojemu su gostovali mr. sc. Branko Baričević (voditelj Predstavništva Europske komisije u Hrvatskoj), dr. sc. Stjepan Ribić (direktor Regionalne razvojne agencije SiB), doc. dr. sc. Tunjica Petrašević (nositelj Jean Monnet katedre za procesno pravo EU na Pravnom fakultetu u Osijeku), izv. prof. dr. sc. Mario Vinković (prorektor za nastavu i studente Sveučilišta J. J. Strossmayera u Osijeku), doc. dr. sc. Anita Frajman Ivković (predsjednica Programskog odbora Europskog EFOS tjedna), Anita Đorđić (bivša studentica EFOS-a i pripravnica u Europskoj komisiji), Marko Vidakušić, mao. oec. (bivši student EFOS-a i asistent u Europskom parlamentu). Razgovor na „Uniji predrasuda“ temeljio se na prethodno provedenom istraživanju kojemu je cilj bio testirati određene predrasude vezane za Europsku uniju, a koje su u većoj ili manjoj mjeri postale stav građana (posebice studenata). Gosti okrugloga stola svojom su ekspertizom i radnim iskustvom argumentirano komentirali postavljene predrasude, kao i rezultate istraživanja.

Europsku kavu u mom Osijeku po konceptu okrugloga stola moderirala je studentica Vedrana Sabljo koja je svoju želju napuštanja Osijeka u potrazi za bojim životom podijelila s Draganom Vulinom, mag. ing. el. (zamjenikom župana Osječko-baranjske županije), Vladimirom Hamom, dipl. oec. (zamjenikom gradonačelnika Grada Osijeka), izv.

prof. dr. sc. Sunčicom Oberman Peterkom (prodekanicom za nastavu Ekonomskoga fakulteta u Osijeku), dr. sc. Stjepanom Ribičem (predsjednikom uprave Regionalne razvojne agencije Slavonije i Baranje), mr. sc. Darijom Krstić (voditeljicom centra za poduzetništvo Osijek) te Donninom Šimatić (predsjednicom Savjeta mladih Osječko-baranjske županije). Gosti kave su, svatko iz svoje perspektive, iznijeli pozitivne pomake koji se događaju u Gradu i Županiji te razloge zbog koji ova sredina ima potencijala za rast, razvoj i napredak. Pri tome je naglasak bio na brojnim mogućnostima za mlade ljude koji mogu svojim proaktivnim djelovanjem i u ovoj sredini ostvariti svoje potencijale čineći ju time privlačnijim i ugodnijim mjestom za život.

U nastavku je uslijedilo predavanje „Moj Osijek 2020“ na kojem su prof. dr. sc. Sunčica Oberman Peterka i Kornelija Mlinarević (pročelnica Upravnog odjela za programe i projekte Europske unije i gospodarstvo Grada Osijeka) komentirale Strategiju razvoja Grada Osijeka do 2020. „Od industrijskog do inteligentnoga grada“ i aktualnu situaciju u gradu. Nastavno na to, Danijela Beretin je kroz dvosatnu radionicu „Upomoć - kamo s otpadom“ pojasnila sudionicima kojih se direktiva EU moramo pridržavati u tome sektoru te kako održivo gospodariti otpadom na siguran i učinkovit način bez sankcija. Prvi dan završio je kratkim osvrtom Marijane Bošnjak (direktorice Kinematografa Osijek d.d.) nakon čega je pred punim kinom Urania prikazan europski film.

S obzirom da su studentski projekti doprinose oblikovanja javnoga mnijenja o EU-u (ostvareni u okviru kolegija Institucijski sustav EU-a) bili jedan od poticaja organizacije obilježavanja Europskog tjedana na EFOS-u, studenti su tom prilikom nastavili ranije započetu suradnju s OŠ Antuna Mihanovića te je četrdesetoro učenika 2. razreda dva dana sudjelovao na radionici „Na (naj)mlađima EU ostaje“. Djeca su pokazala zavidno znanje o EU-u, a njihova aktivnost i spremnost za suradnju oduševila je studente koji su moderirali radionicu. Maskota EU znalac, koju su studenti izradili za tu prigodu, upotpunila je dječje viđenje i spoznaju važnosti posjedovanja znanja o Europskoj uniji.

Četvrtak, 7. svibnja, nastavio se četirima radionicama: „Koga briga za (moju) sreću“ koju su vodili doc. dr. sc. Anita Frajman Ivković i Danijel Mišura, mag. psych, „Ostvari utjecaj kroz profesionalno lobiranje na etičan način“ mr. Tanje Milošević, „Volontiram – dakle jesam, u Europi“ doc. dr. sc. Julie Perić i Volonterskoga centra Osijek, te „EURES – moja mogućnost za bolju budućnost“ Enise Kifer,

dip. oec. Pred punom Aulom glagoljice tribinu „Ne dirajte mi ravnice prava - bilo kuda glazba svuda“ održao je Miroslav Škoro. Radionica za koju su studenti inicijalno pokazali najviše interesa bila je „Usudi se prijeći granice – Erasmusiraj se“ koju je moderirao student Mislav Mihaljević. Predavanje „Semestar u inozemstvu“ održale su Martina Šuto, prof., prof. dr. sc. Sanja Pfeifer i doc. dr. sc. Marina Jeger, a gostovali su i brojni studenti koji su već bili na razmjeni i koji su svoja iskustva iz prve ruke podijelili i u nastavku dana u ležernijoj atmosferi „EU cafea“.

Zadnji dan programa Europskog EFOS tjedna obilježio je *talk show* „Petkom u podne“ tijekom kojeg je Danijel Čahajić ugostio prof. dr. sc. Davora Škrleca (zastupnika u Europskom parlamentu) koji je svojim otvorenim pristupom govorio o održivom razvoju, te na kraju proglasio pobjednike natječaja „Pravim pitanjem do Bruxellesa“. Njegov asistent, Uroš-Valentino Saraja nastavio je s otvorenim razgovorom „EU lega u Osijeku“ kojim se nastavila suradnja ostvarena prethodne akademske godine. Ostatak dana upotpunile su radionice „Naši novci, njihova naša briga“ doc. dr. sc. Ive Mijoča, „Kako kroz europsku pra(v)šumu“ doc. dc. sc. Dunje Duić, predavanje „Zdrav (pre)živjeti u Europi“ prof. prim. dr. sc. Dragutina Kadojića i Kristijana Dinjara, dr.med., te radionice „Prečaci za podatkovni EU labirint“ doc. dr. sc. Josipe Mijoč i „Kupi me, zaštiti se“ Dunje Mak, mag. iur. Obilježavanje Europskog EFOS tjedna završilo je stand up programom „Smiješna strana Europe“ u Auli glagoljice.

U konačnici, cilj događanja bio je biti centralno mjesto za pronalaženje informacija koje mogu i trebaju oblikovati budućnost mladih, posebice studenata. Brojne ostvarene suradnje koje su rezultat ovog događanja govore tome u prilog: najbolji studenti imali su priliku nakon dva tjedna posjetiti Kuću Europe u Zagrebu (<http://www.efos.unios.hr/studenti-efos-a-u-kuci-europe-u-zagrebu-21-i-22-5-2015/>) te sudjelovati na studentskoj konferenciji u suradnji s Kućom Europe i Fakultetom političkih znanosti; pobjednici natječaja „Pravim pitanjem do Bruxellesa“ (<http://www.efos.unios.hr/natjecaj-pravim-pitanjem-do-bruxellesa/>) otputovat će u Bruxelles krajem lipnja, a desetak volontera ide na Open Days u Bruxelles u listopadu. Ostaje vidjeti kakve će dodatne učinke cijelo događanje imati na studente i ostale posjetitelje koji bi, svjesni svojega potencijala i mogućnosti, iste mogli staviti u funkciju razvoja lokalne zajednice stvarajući pri tome sinergijske učinke.

Nives Tomašević  
University of Zadar  
Department of Library and Information Sciences  
Ul. dr. Franje Tuđmana 24i,  
23000 Zadar, Croatia  
tomasevic.nives@gmail.com  
Phone: +38598202279

## KREATIVNA RIZNICA: POPULARIZACIJSKI SIMPOZIJ KULTURNE I KREATIVNE INDUSTRIJE EKONOMSKOG FAKULTETA U OSIJEKU

Svako promicanje razumijevanja, osvještavanja, a prije svega educiranje i informiranja svih dobnih skupina o kulturnoj i kreativnoj industriji trebalo bi se nalaziti u fokusu interesa političkih i akademskih institucija te strukovnih i umjetničkih udruženja kreativaca buduće industrije. Jedan od pozitivnih primjera koji je ujedinio navedene elemente popularizacijski je simpozij „Kreativna riznica“ održan na Ekonomskom fakultetu u Osijeku u travnju 2015. godine.

Pema riječima organizatora i sudionika Kreativna riznica događanje je koje primiče i naglašava važnost kulturne i kreativne industrije za cjelokupnu zajednicu, a poseban naglasak je stavljen na akademsku zajednicu i mlade dobne skupine. Kreativna riznica bio je prvi popularizacijski simpozij kulturne i kreativne industrije u Republici Hrvatskoj te se drži iznimno važnim za promicanje ovih industrija. Popularizacijski simpozij uspio je udružiti sveučilišne potencijale te okupiti nastavnike s više sveučilišnih sastavnica Osječkog i Zadarskog Sveučilišta. U medijskim najavama izdvajana su ugledna imena kulturne i kreativne industrije, poput akademika Stjepana Damjanovića i Dubravke Oraić-Tolić te prof. Stanislava Marijanovića (člana suradnika HAZU), brojna imena iz javnoga života, poput Ivane Nikolić Popović iz Klastera konkurentnosti

kreativnih i kulturni industrija, Mladena Špehara i Ane Perišić Mijić iz Ministarstva kulture, Ante Šalinovića iz Agencije Ipsos Puls, Renate Margaretić Urlič i Deana Šoše s HRT-a, Antonija Todorovića Dimishkovskog iz Infinite Solutions, Ivane Ljevak Lebeda i Petre Ljevak iz Naklade Ljevak, Nevena Antičevića iz Algoritma, dogradonačelnika Osijeka Vladimira Hama, itd. Program je organiziran na način da se poveća svijest sudionika o važnosti kulturne i kreativne industrije kao stvaratelja proizvoda i usluga izrazitog izvoznog potencijala, odnosno stvaranja 100% domaćeg proizvoda.

Program je trajao 4 dana (22. – 25. travnja 2015.). Sva četiri dana u cijelosti su bila ispunjena zanimljivim sadržajima. Događaj iako namijenjen prvenstveno studentima preddiplomskih i diplomskih studija svih sastavnica Sveučilišta Josipa Jurja Strossmayera u Osijeku, privukao je i srednjoškolce, umirovljenike, samozaposlene, nezaposlene osobe te gospodarstvenike.

Programski odbor u kojem se nalazilo 15 znanstvenika potpisalo je program prve Kreativne riznice. U programu je svoje mjesto našlo više od 70 raznovrsnih događanja (predavanja, radionice, okrugli stolovi, tribine, izložbe, performansi, predstavljanje knjiga, kinopojekcije te glazbeni program)

na kojima je sudjelovalo 117 izlagača.

Tablica 1 Vrste događanja Kreativne riznice

Vrsta događaja	Broj događaja
predavanja	35
radionice	15
predavanja/radionice	4
tribina	1
glazbeni program	2
kazališni performans	1
okrugli stolovi	5
predstavljanje knjiga	1
izložbe	5
kinoprojekcije	2
<b>Ukupno</b>	<b>71</b>

Teme predavanja su raznovrsne i odnose se na pojedine segmente kulturne ili kreativne industrije. Organizirane radionice i kulturna događanja imala su za cilj popularizirati važnost kreativne industrije u razvoju društva i njezin doprinos oživljavanju gospodarstva. Ponuđena događanja poticala su kreativnost i kritično promišljanje studenata i ostalih sudionika.

Neke događaje održavaju studenti, u neke su uključeni studenti kao suradnici, a u sva događanja studenti kao sudionici čime im se daje prilika da promoviraju i razviju svoje prezentacijske, timske i organizacijske vještine, prošire svoja znanja o određenoj tematici te tako daju svoj doprinos simpoziju. Konceptija programa je takva da razvija interakciju i potiče međusobno druženje studenata istih, a naročito različitih fakulteta s ciljem stvaranja međusobne sinergije.

Organizatori koji su zaslužni za provođenje ovog događaja su Ekonomski fakultet u Osijeku, Institut za znanstvena i umjetnička istraživanja u kreativnoj industriji – Andizet i Studentski zbor Sveučilišta Josipa Jurja Strossmayera u Osijeku. Dekan Ekonomskog fakulteta u Osijeku kao domaćin ovog događanja otvorio je Kreativnu riznicu te ocijenio kako je Kreativna riznica pokazala da kultura nije statična kategorija, premda ju treba čuvati u riznici i neizostavno kreativno unaprjeđivati upravo

onako kako je to pokazala Kreativna riznica. Na otvorenju su uz dekana govorili i zamjenik osječkog gradonačelnika Vladimir Ham i prof. dr. sc. Jasna Horvat kao predsjednica Programskog odbora Kreativne riznice. Profesorica je Horvat govorila o razlozima zbog kojih je Kreativna riznica dobila upravo takvo ime. Riječ “kreativna” izabrana je radi širine pojma koji u sebi podrazumijeva i kulturu i stvaralačku domišljatost, a riječ “riznica” radi poveznice s EFOS-om koji poučava o gospodarenju resursima i stvaranju dodanih vrijednosti. Nazočne je pozdravio i zamjenik gradonačelnika Vladimir Ham. U svom je govoru izrazio mišljenje kako je upravo Kreativna riznica događanje koje je gradu potrebno u njegovu natjecanju za Europsku prijestolnicu kulture. Posebnom vrijednošću Vladimir je Ham ocijenio otvorenost Kreativne riznice širokoj javnosti, ali i raznovrsnost ponuđenih događanja. Odmah nakon otvorenja, otpočela su izlaganja.

Sudionici atmosferu opisuju kao iznimno dinamična, a prostore fakulteta aktivnim susretištem znanstvenika, profesionalaca i amatera iz svih sastavnica sektora kulturne i kreativne industrije.

Na događaje su se mogli prijaviti svi zainteresirani, a jedini je uvjet ispuniti kratku prijavu za svaki pojedini događaj na kojem su sudionici željeli prisustvovati. Prijava se odvijala preko sustava Eventzilla<sup>1</sup> koja svoje usluge ne naplaćuje ukoliko je riječ o događanjima koja su besplatna za sve sudionike. Sudionicima je nakon prijave na e-adresu pristigla potvrda o prijavi na predavanje sa svim informacijama te QR kodom kojim su prilikom dolaska na događanje evidentirali svoj dolazak. Sudionici radionica dobivaju certifikate za sudjelovanje. Prije početka samog događanja sustav Eventzille zabilježio je više od 1700 prijava, dok je u konačnici realizirano gotovo 1300 prijava.

Sama događanja odvijala su se na dvije lokacije: Ekonomski fakultet u Osijeku i Coworking Osijek. Događanja održana na Ekonomskom fakultetu u Osijeku odvijala su se paralelno u 6 dvorana te Auli glagoljice.

Volonteri su bili posebna snaga ovog događanja jer je o četiri dana ovog događanja brinulo 55 volontera, od kojih je 6 bilo fotoreportera.

<sup>1</sup> www.eventzilla.net

Slika 1 Sažetak organizacijskih rezultata Kreativne riznice



Na sva organizirana događanja ulazak je bio slobodan za sve, a za posebno aktivne posjetitelje pripremljene su i nagrade.

Važno je istaknuti kako je prva Kreativna riznica otpočela kao volonterski i entuzijastični projekt svih sudionika ovog simpozija, od izlagača, organizatora do sudionika. Konačna statistika ovog događaja zapisana je u tablici.

Tablica 2 Sudionici simpozija Kreativna riznica

Sudionici	Broj sudionika
Izlagači	117
Volonteri	55
Organizacijski odbor	13
Programski odbor	15
Sudionici događaja	1289
<b>Ukupno</b>	<b>1489</b>

Kreativna riznica popularizacijski je simpozij kreativne industrije koji je svoja nastojanja usmjerio na udruživanju profesionalaca i amatera te teoretičara i stručnjaka/umjetnika. Organizatori ovoga događanja u izjavama za medije izjavljivali su kako je upravo nedostatak dijaloga znanosti i struke prijepor koji je potrebno nadvladati u fazi institucionaliziranja kreativne industrije. Tako organiziran simpozij popularizira kreativni sektor u nastajanju te mogućnosti samozapošljavanja u poslovnim pothvatima koji kreativni potencijal crpe iz kulture. Dekan Ekonomskog fakulteta u Osijeku dogovorio je aktivnu suradnju s Umjetničkom akademijom u Osijeku i drugim sastavnicama Sveučilišta Josipa Jurja Strossmayera kao i s kulturnim institucijama iz Osijeka i Republike Hrvatske.

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