

**RESEARCHING INNOVATION STRATEGIES OF FOREIGN INVESTMENT
ENTERPRISES:
THE CASE OF CROATIA**

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1. INTRODUCTION

Foreign investment enterprises, characterised by MNE ownership are differentiated by the desired strategic goals, executed through their business activities. In general, these enterprises can be seeking to access the international (global) market, increase efficiency and production flexibility of its business group, exploit low acquisition price of state-owned companies in comparison to the investment risk (Bitzenis and Marangos, 2008), delocate/relocate the production activities towards low-wage countries as well as tapping into localised tacit knowledge (cf. Costa and Filippov, 2008). In business practice, strategic goals have been achieved simultaneously with the existence of a goals hierarchy, hence one goal (e.g. increase efficiency within MNE group) presents a priority in comparison to other goals. In the context of achieving strategic goals innovation activities within firm's strategy frequently presents a crucial activity.

Innovation strategy refers to the introduction of new products or processes within enterprises and may depend on technology acquisition, innovation strategy of their owner, level of competitiveness (cf. Aghion, Carlin, Schaffer, 2002) as well as ownership type (e.g. MNE). In developing markets such as Croatia, foreign owned enterprises show more inclination towards performing innovation activities in comparison to enterprises with domestic owners. So, knowledge primarily within MNE (a majority of foreign investors within manufacturing sector) enhances the opportunity to perform innovative strategy within local subsidiaries.

Moreover, MNEs are trying to increase their potential for competitive advantage on the local market by enabling local subsidiaries to perform business activities, enhancing competitiveness and value of the firm in a more long-term horizon. Thus local subsidiaries are a vehicle for enhancing MNE resources and capabilities, and by so doing add value to their foreign investor enterprises as a whole (cf. Birkinshaw, Hooda and Jonsson 1998). However their innovation strategies could be observed as dependent on the strategy of their owner. Moreover, innovation strategy to an extent depends on the institutional framework (e.g. characteristics of the financial system) (cf. Tylecote and Visintin 2008). Innovation capacity of local subsidiaries i.e. the ability to perform innovative activities presents an important stimulus aimed at innovation strategy development. Johanson and Vahlne, (1977) stated that technological capabilities in the local subsidiaries are closely associated with accumulating international experience of MNEs and increasing commitments to foreign markets. It seems that over time foreign investor enterprises stimulate increase of technological activities (e.g. R&D and innovation activities) within their units where foreign investor enterprises (primarily MNEs) exploit local opportunities (cf. Luo and Peng, 1999; cf. Holm and Deo Sharma, 2006). This explanation could be described as systemic (broader) approach in innovation strategy research where this approach implies viewing innovation strategy in the context of institutional characteristics of entrepreneurs, firms and their environments. This approach appears in innovation performance analyses where researchers tackled the effects of industrialization specialization, corporate governance (and/or institutional framework) on innovation performance (Visintin 2001). Similarly, in case of United Kingdom, Tylecote and Ramirez (2005) have explained the influence of country's corporate governance and financial system and its influence on innovation.

The main focus of the paper is to explain differences between local subsidiaries in terms of innovation strategy. Differences could appear in the manner of use of various types of innovation as well as in firm's innovation activities intensity (radical/incremental) in comparison to industrial average where a local subsidiary belongs. Since local subsidiaries are foreign owned enterprises these differences could be explained primarily by the distribution of business function between foreign investor enterprises and local subsidiaries on the local market. Hereby, differences in types of ownership could be a crucial factor of explanation. Moreover, these differences could be explained by other characteristics like local subsidiary market orientation (domestic and/or international) as well as type of customers e.g. selling to MNE headquarters and/or other independent firm on the local and/or international market. The data used in this analysis was generated by a survey of knowledge transfers and innovation activities in manufacturing enterprises recipients of foreign direct investments in the period 2004-2006.

The aim of this paper is to explore the behaviour of local subsidiaries (foreign owned entities) in terms of their innovation strategies upon entry into the host country (Croatia) and at present. Since foreign owned enterprises achieves competitive advantages on the domestic markets through performance of local subsidiaries, innovative performance of local subsidiaries present an important tool of achieving competitive advantage for foreign investor enterprises in the local market such as Croatia. In this paper, we try to confirm the hypothesis there is statistical significant difference measured by regression modelling between local subsidiaries regarding their innovation strategy.

The contribution of this exploratory paper is twofold. Firstly the paper contributes to the discussion about innovation strategy within local subsidiaries. Secondly, it explains innovation strategy primarily through relationship between local subsidiaries and foreign

investor enterprises as well as researching business framework influences on local subsidiaries innovative performance. In addition, the paper has clear policy implications since it implies the significance of external, in this case foreign, knowledge sources in Croatia. We have structured the paper on the way that after introduction literature review on strategic motives and outcomes in terms of foreign direct investment (FDI) behaviour and relating to innovation activities follows. In the next section, the methodology and data survey analysis will be introduced. In fifth section the results of the research are presented. Finally, concluding remarks are presented in the last section.

2. LITERATURE REVIEW

The literature on the determinants of FDI has been influenced by theories of international business and by international economics (Bellak et al., 2008). Through internationalization as a method to open up different strategic options (Saarenketo et al., 2008), MNEs are looking for building/sustaining different types of advantages in front of their competitors. Through FDI processes MNEs are exploiting the advantages of global operations. Doing business in many markets for MNEs can become a base for comparative advantages determined by the differences in the natural resources, availability of land, capital, labour force, etc. But with the globalization of the market, both domestic and international levels of competition have increased together with the increase in pricing competitiveness and the non-price competitiveness. Comparative advantages are not enough anymore for global competition; MNEs must build up sustainable competitive advantages. In conditions of global, rapidly changing competition, investments into dynamic, know-how based competitive advantages are becoming more important. The ability to develop new technologies more rapidly than other firms as well as the ability to promote and facilitate technological innovations is determining competitive advantages in the global market (Guan and Ma, 2003). Because, MNEs require rapid growth of overseas research and development capacity (Chung et al., 2003) so improvement of for example innovation capability has become crucial element in building and sustaining international/global competitive advantage.

The capability not only to create, but also to apply (Castro et al., 2008) a new knowledge, where it has been considered as one of the main sources of the competitive advantage, implies two-direction process going on between the investor (MNE) as well as the investment recipient (local subsidiary). Therefore an innovation capacity of local subsidiaries is strongly affected by quality of innovation and R&D activities within firms and at the same time it means firm's ability to exploit external knowledge (Cohen and Levinthal 1990: 138). The primary issue within firm regard with innovation capacity is the choice between investments into own R&D and innovation activities and acquisition of external technology. The choice between these options depends on the available technological knowledge, expected outputs, as well as on the accompanying risks and costs of conducting R&D and innovation activities.

In that context, Nassimbeni (2001: 248) argues that innovation capacity is tightly connected with product adaptation, in time when firms begin to internationalize its business activities. In this matter competence of firm's management in recognition of specific market demand is crucial since innovative product and/or processes cost is not standardized. Major challenge for MNEs is to find an organizational system capable of transferring know-how across units and locations, allowing locally generated know how to be used throughout the multinational organization (Sanna-Randaccio and Veugelers, 2003). In many studies show that parent companies have a positive influence on local subsidiaries and their innovation activities through knowledge transfer (Sourafel, Greenaway and Wakelin, 2001; Damijan et al., 2003) .

It seems that in researching innovation strategy is core relationship between innovation activities and firm's competencies where mutual dependence between firm's competence and innovation activities exists. According to Danneels (2002: 1096) there are three approaches which describe this relation. The first conceptual framework is based an integration of the scholarly literature regarding product innovation, organizational resources and competencies which incorporates organizational learning and path dependency; the second approach examines product innovation from resource-based perspective where core capabilities may stimulate and/or impede product innovation; the third dynamic capabilities approach in which product innovation is treated as dynamic capabilities of the firm where innovation could alter the resource configuration of the firm (see for example Eisenhardt and Martin 2000).

The results of inward FDI in the local market depend on the role of the local subsidiary where their efficiency varies in their interactions with the parent, with other business units of the parent's network, and with local businesses (Meyer, 2004). Developing effective local subsidiaries is of particular concern to MNEs in the developing countries (cf. Uhlenbruck, 2004) like Croatia, where creating of revenue-generating potential as well as their added value to the MNE are a basis for further development.

Since, innovation and R&D are risky activities which design and implementation and commercialization frequently require a large amount of financial resources, R&D cooperation as an operational mode become popular where participants from public and the business sector appear as partner. In that context, R&D cooperation between MNEs and its local subsidiaries is frequent and present a result of requirement for downsizing firm's business activities risk associated with the market introduction of product and/or process and (Von Hippel, 1988). In terms of organisational modes this cooperation could varies from wholly-owned subsidiaries with full internalisation of transaction, across various types of equity and non-equity agreements (which include team collaboration) to interpersonal collaboration more informal cooperation (Lundin, Frinking and Wagner, 2005). The type of R&D cooperation and type of partners involved into R&D (e.g. MNE) definitely influence innovation strategy of local subsidiaries. Whereby, a partner from the public and the business sector such as foreign investor enterprise has a twofold role; the first role as a participant of R&D cooperation and the second role as a knowledge source for local subsidiary's R&D and innovation activities. Furthermore, participation on the different markets (domestic and international) could presents a source of knowledge for local subsidiaries R&D and innovation activities and finally successful application of external knowledge definitely depends on firm's innovation capacity (cf. Knell, Rojec 2007).

It is obvious that MNEs need to cope with different markets in many different ways, as well as the government of country that receives foreign investments needs to cope with different types of FDIs in different ways. Generally, together with the rapidly changing global market, changes in corporate strategies of multinationals could have important implications to subsidiaries located overseas (Costa and Filippov, 2008). Possible changes of MNE's corporate strategies and goals should be observed more closely by host governments due to their different possible spill over effects on host country economy. As MNEs are recently seen as the firms playing a crucial role in the development of many emerging economies, they became the focus of researches conducted by economists and policy analysts. Most of conducted studies have emphasised their strategic behaviour, with the implications on their performance as the global players on the global market. Being the global player, it is obvious that MNEs pursue global strategic objectives that can motivate FDI. Accordingly, FDI can be

classified into resource seeking, strategic asset seeking, market seeking or efficiency seeking (Dunning, 1993, 2000). These objectives are directed by MNE's headquarters and fulfilled by its subsidiaries that play various roles within MNEs. Consequently, the objectives vary in their interactions with the parent, with other business units of the parent's network, and with local businesses (Meyer, 2004). Seeking for optimal locations for raw materials, intermediate goods, services 'brain arbitrage' or assembly plants (Murtha et al., 2001) MNEs are creating different types of spill over – either positive or negative ones.

Furthermore, Keller (2002) argues that for most countries foreign sources of technology are of dominant importance – ninety per cent – for productivity growth. Foreign sources of technology are more important for small and developing countries like Croatia in comparison to bigger countries, and the relative importance of international technology diffusion appears to be increasing along with higher levels of economic integration (cf. Keller, 2004) where FDI and international trade present important driver of Croatia's economic integration into the EU.

The ability of the host country to benefit from the inward FDI is often a great challenge, as they may play either a positive or a negative role in economic development (Tiits, 2007). FDI can promote the exports of the host country, facilitate access to new and large foreign markets, and provide training for the local workforce, upgrading technical and management skills, (Zhang, 2007). As well it can influence other domestic firms by having demonstration/imitation effects, increasing competitive pressure by spurring local firms to operate more efficiently (Flores et al., 2007), etc. On the other hand it may lower or replace domestic savings and investment, not transfer advanced technologies, target primarily the host country's domestic market and thus not increase exports, inhibit the expansion of indigenous firms that might become exporters and not help in developing the host country's dynamic comparative advantages by focusing solely on local cheap labour and raw materials (Zhang, 2007), attract the best workers from domestic firms by offering higher wages, cause an increase in prices which penalises domestic firms' costs through production quality upgrade induced by the presence of MNEs (Flores et al., 2007), keep their knowledge-intensive activities in their country of origin, especially in sectors in which knowledge capital is most important (Siotis, 1999), etc. Lately, the pure quantitative approach in considering FDI by host country has been increasingly replaced by a more qualitative one as evaluations in terms of their impacts on host countries' innovation dynamics, have come to the fore (Costa and Filippov, 2008).

The expected benefits for host countries would be an increase of employment rate, survival of local firms in crisis through foreign acquisitions or joint-ventures, acceleration of the rate of technological transfer for both- subsidiaries as well as other domestically owned firms through imitation, R&D expenditure increase, innovation (new product development), increase of consumer welfare by overall price level fall, pushing exporting activities etc. In such economies it is expected that the firms with foreign participation will have access to more sophisticated marketing capabilities enabling them to outperform their domestic counterparts (Fahy et al., 2000). The potentially negative effects of growing levels of foreign investment on domestic market structures and national sovereignty have long been the focus of attention as have the harmful affects of foreign investment in less developed countries (Hooley et al., 1996). Still, we have fairly little knowledge about resource and capability creation in foreign subsidiaries (Rugman and Verbeke, 2001) as there has been little contribution to a debate of long-term negative effects of FDI in host transition countries on acquired firms as well as on the overall national economy.

3. METHODOLOGY

Available data provided a representative sample of key foreign companies, namely Croatian foreign owned manufacturing companies, active in the Croatian market. Consequently, the firms were analysed via a postal survey throughout April and May 2007. It was completed by a poll-taker who subsequently contacted every firm from the population of foreign-owned enterprises. The database was created according to available data from Institute for Business Intelligence in Croatia and captured the main companies in foreign ownership, which amounted to 220 companies, following the exclusion of dormant, extremely small or non representative companies¹. The analysis includes enterprises in the manufacturing sector only. The questionnaire was created on the basis of a panel session (twenty two questions), addressing the basic information about the firm, the relationship between the foreign investor (or a number of investors) and the firm, and R&D and innovation activities, both on the point of entry into the Croatian market and from the viewpoint at the time of the questionnaire.

Using regression modelling (binomial logistic regression analysis and likelihood ratios), the differences in firm behavioural patterns were identified on the basis of the processed data from the questionnaire. Ownership type in the questionnaire was separated into six main groups (question 5) – MNE, foreign SME, foreign financial company, public sector company, domestic financial company or company owned by workers or managers. The classification for each question was binary, Yes or No, hence the use of the binomial logistic regression model. MNE as a type of ownership is therefore a binary dependant variable in the model. The analysis focused on three main areas (as independent variables) on the basis of the data generated through the survey. The results draw on the groups where statistically significant differences have been found between groups.

The first area analysed was the overview of the strategic motives, embedded in the decision making process of foreign firms before and after their entry into the Croatian market. The implicit assumption is that overwhelmingly, foreign companies seek to expand their markets, but as the literature suggests, this is not always the case (Dunning, 1993, 2000). Accordingly, the questions attempt to capture the initial strategic motives for the entry into the Croatian market, but also to define and establish the changing strategic attitudes with the passage of time. It is important to note that behavioral changes were analysed for two main ownership categories, namely foreign owned firms and firms which are part of a multinational enterprise (MNE). The motives may have changed due to internal and external factors, and certainly in the context of establishing the links between intentions and results required a dynamic insight into the evolution of the strategic motives.

Second aspect of this analysis examined the strategic decisions of the foreign owned companies in Croatia. Importantly, the questionnaire layout allowed for the clear distinction between MNE units and companies which are not a part of a MNE which could present an important knowledge source for local subsidiary's innovation and R&D activities (for more, see Knell, Rojec 2007: 41). Using logistic regression analysis, the aim was to determine the links between innovation activities of MNE subsidiaries in terms of the impacts on innovation in marketing, product and process development. Here, development implies improvements to processes and products resulting from innovative local solutions and ideas which have been incorporated into the business practice where existing knowledge of foreign investor

¹ The survey sample size was 220, with 66.0% response rate.

enterprises presents a knowledge source and can therefore be identified and linked with the innovation activities themselves.

Finally, in the third part the link between product development and exports was examined, namely exports oriented towards the MNE headquarters situated abroad. Previous empirical research about Italian small business entities confirmed link between ability to innovate product and develop inters organizational relations on the one hand and propensity to exports on others (Nassimbeni, 2001). Since a majority of local subsidiaries in manufacturing in Croatia are small and medium enterprises more than eighty percent (82.8 percent) similar approach had been used here. The distinction had to be made to capture the goods and services simply processed in the local market and then exported to the headquarters but which had nevertheless been impacted by the work and R&D in the local market, i.e. through the use of local knowledge and resources.

4. RESULTS

The results produced interesting outcomes, warranting the interest in this topic as well as further research in this area. The analysis has show that various types of ownership are the determinant factor between local subsidiaries in terms of innovation strategies.

Results in terms of the dominant strategic motives for FDI investment into the Croatian market, as shown in figure 1., show that there were no substantial changes in the strategic logic of MNE investors. Namely, the motive was simply access to new markets as well as creating efficiency gains both at the point of entry and after a time lapse. On the other hand, it is interesting to note the increase in the importance allocated to the access to local knowledge, skills and technologies, which increased in the period analysed. Interestingly, most active, in terms of orientation towards sales in the local market, are slow growth companies, not part of MNEs. They generated 49.49 % of income from sales in the local market in comparison to 27.19 % of MNE members.

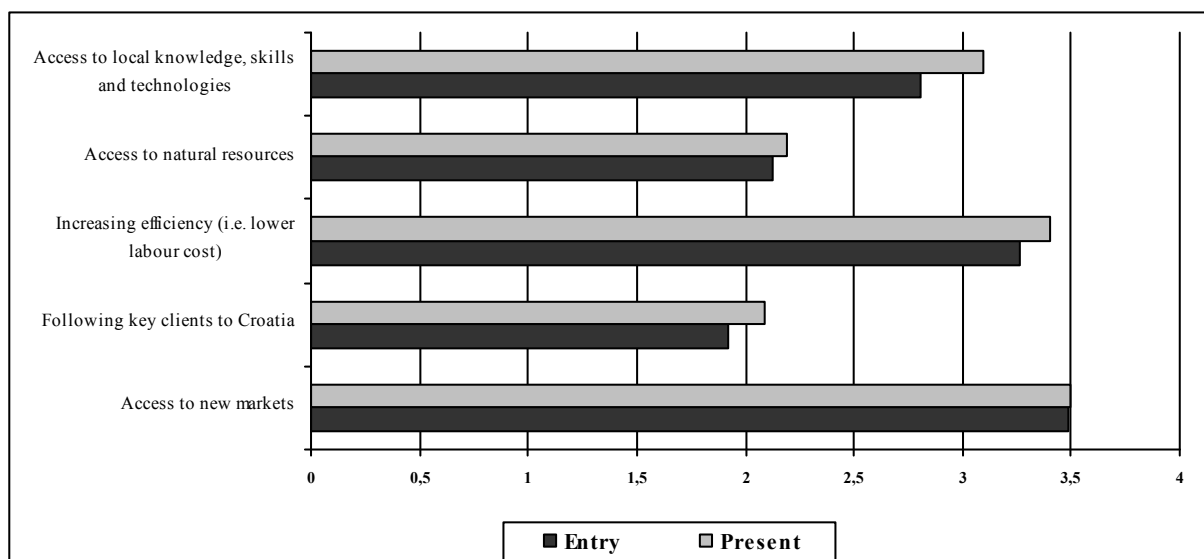


Figure 1. EIZ (2007: 6) Strategic motives of the foreign investors on entry into the Croatian market and at present (2007), mean value on the 1-5 scale (1-not important, 5-indispensable)

Further analysis (binomial logistic regression analysis and likelihood ratios), the summary of which is provided in table 1., show that local subsidiaries, owned by MNE, show more inclination towards product innovation. Local subsidiaries in Croatia (not a part of MNE, a methodological category explained in the methodology section) in comparison to their counterparts (i.e. local subsidiaries, parts of MNE) have a likelihood ratio of 2.247 of not developing their products.

MNE subsidiaries therefore innovate semi finished products or use existing knowledge of their owner companies and place these in the local markets. While this is not necessarily an indication of inefficiency, but on the contrary is a reflection of the efficiency efforts by the MNEs themselves, the clear absence of local innovation emphasis generates further questions relating to the long term strategy by foreign subsidiaries in local markets such as Croatia.

Table 1. Product innovations difference between groups

Variable	Exp B	Standard error	t-value
Non MNE unit product innovations	2,247	0,366	0,027

Source: Author's calculations

MNE units are more likely to possess innovative products. More than half 60.2% of foreign investor enterprises have innovative products (EIZ 2007: 12). Certainly, a contributing factor is the knowledge available within the overall MNE group, as a reliable source of knowledge for local subsidiary's research and development and innovation activities.

Similar results appear in case of marketing innovation (see table 2). Local subsidiaries owned by Multinational Enterprises show more inclination towards marketing innovation in comparison to local subsidiaries not owned by MNE. Foreign owned non MNE companies, in comparison to local MNE subsidiaries, have a 2.437 likelihood ratio that they do not innovate in marketing.

Table 2. Marketing innovations difference between groups

Variable	Exp B	Standard error	t-value
Non MNE unit marketing innovations	2,437	0,377	0,018

Source: Author's calculations

This implies that MNE subsidiaries are more active in marketing development, but also that knowledge transfer in terms of marketing is particularly relevant in MNE structures. In addition, there is a clear danger of perception bias, since new developments in marketing can be perceived as an innovation by MNE subsidiaries purely on the basis of the trend for local tailoring of marketing needs. This means that the majority of the research and development has already been undertaken by the MNE Head office, but the implementation and potential adjustments of the products are made locally, which is perceived as local innovation by local subsidiaries operating in strict organisational structures such as many MNEs. Researching similar population of small and medium enterprises (SMEs) in Croatia, Račić, Aralica, Redžepagić (2008: 296) found that high growth SMEs (measured by above average increase of total revenues and number of employees in the analysed period) is more active in marketing innovation than other SMEs. Whereby this results was explained by the fact that

SMEs compensate low level of innovativeness. It seems that results about marketing innovation are still inconclusive and further researches are required.

Using forward stepwise method in the analysis of the product development likelihood ratios yielded statistically significant results for the variable of income from sales to HQ company. Likelihood ratio that a company does engage in product development increases by 7% if exports to MNE headquarters increase by 1% (t-value 0.004, standard error 0.023). This suggests that companies exporting to MNE headquarters are not primarily market oriented, implying a lack of emphasis on developing technical capabilities in line with the perceived requirements of the local market. Another implication of this is that foreign owners use local subsidiaries as vehicles for the exploitation of cheaper labour and potentially for the production of semi products, i.e. unfinished products requiring less technological knowhow and more labour intensive.

In addition, these companies can be grouped by a higher tendency for exports and export activities, in particular to their MNE group, or other members of their MNE group. Hence, a positive correlation was found between the level of “in house” trading and the level of innovation within a MNE group, highlighting the value added of local subsidiaries and the impacts of local resources. Finally, non MNE subsidiary has a likelihood ratio of 2.006 of not innovating their processes which implies that local MNE subsidiaries show more inclination towards process innovation².

Table 3. Process innovations and sales to domestic companies.

Variable	Exp B	Standard error	t-value
Non MNE unit process innovations	2,006	0,363	0,055
Non MNE unit sales to domestic companies	1,012	0,005	0,028

Source: Author's calculations.

It seems that MNEs in Croatia are more active than domestic companies in terms of fostering innovation for domestic market. Given the relatively small size of the Croatian market and the seemingly long term commitment by the national policy on fostering innovation growth, these results indicate that there is progress to be made still.

It should be noted that research was conducted in field of market orientation and the distribution of business function. However, there is no any statistical significant result which may confirm distinction between local subsidiaries with regard to these variables. So, we may conclude that innovation strategy does not depend on the market orientation type, i.e. the links are implicit. In addition, the distribution of business functions between foreign investment enterprises and local subsidiaries does not influence the innovation strategy.

² ROC curve value 0,585.

5. CONCLUDING REMARKS

Relationship between innovation activities and firm's competencies is the basis for the research of innovation strategy of local subsidiaries and the research into mutual dependencies. The characteristics of innovation strategy differ among local subsidiaries in terms of use various type of innovation activities (product innovation, process innovation, marketing innovation and organizational innovation) as well as in terms of intensity of the firm's innovation activities (radical/incremental). Participation of multinational enterprises in ownership structure definitely presents a crucial factor which influences innovation strategy of local subsidiaries allowing for more frequent product innovation. Local subsidiaries, not part of MNEs, in Croatia; in comparison to local subsidiaries part of MNE have a likelihood ratio of 2.247 of not developing their products. So, local MNE subsidiaries show more inclination towards product innovation, explained by the level of existing knowledge within MNEs. The local subsidiary role is crucial, because these business entities needs to develop own absorptive capacities which is strongly affected by quality of own innovation and R&D activities and at the same this capacity needs to be capable to exploit available external knowledge.

Similar results appear in case of marketing innovation, where local subsidiaries owned by Multinational Enterprises show more inclination towards marketing innovation in comparison to local subsidiaries not owned by MNE. This could be explained by the fact that local subsidiaries are responsible for potential product selling strategy on the local market, while simultaneously more knowledge intensive business functions (e.g. product development) are the responsibility of foreign investor enterprises. However, since marketing innovation presents a differentiating factor between SME groups in Croatia (Račić, Aralica, Redžepagić, 2008: 296) with high growth SMEs more intensive in the use of marketing innovation in comparison to other SMEs, additional research in marketing innovation is required. So, further research should be enhanced in the field of market concentration and investments in marketing innovation.

The presence of multinational enterprises in ownership of domestic business enterprises presents improvements regarding product development and their sales on the international markets. Likelihood that a company does engage in product development increases by 7% if exports to MNE headquarters increase by 1% i.e. likelihood ratios yielded statistically significant results for the variable of income from sales to headquarters (HQ) company. Thus, multinational enterprises present a driver of knowledge demand for their companies (i.e. local subsidiaries), and source of export activities increase, as analysed on macro level. At the same time, local subsidiaries parts of MNEs in Croatia are more active than domestic companies in terms of fostering innovation for domestic market. Given the relatively small size of the Croatian market and the seemingly long term commitment by the national policy on fostering innovation growth, these results indicate that there is progress to be made still.

Regarding with market orientation and distribution of business function there is no statistical significant different result between local subsidiaries in Croatia. Similar results appear in terms of strategic motives for FDI investment into the Croatian market. There were no substantial changes in the strategic logic of MNE investors. Namely, the motive was simply access to new markets as well as creating efficiency gains both at the point of entry and after a time lapse. On the other hand, it is interesting to note the increase in the importance allocated to the access to local knowledge, skills and technologies, which increased in the analysed period.

In conclusion, the survey results yielded interesting findings which contribute to the study of innovation strategies of local subsidiaries in Croatia. Moreover, the survey results contribute to research on links between various types of innovation activities (product innovation and/or marketing innovation) and existing knowledge within MNE which participate in their ownership structure. Ownership by a multinational company enhances the potential for local subsidiaries to sell innovative products on the domestic market and the international markets (to the market where the headquarters or other MNE companies are located).

These findings provide additional insight into the importance of foreign direct investments and the importance of foreign sources of knowledge, with the significance of stimulating innovation activities in developing countries such as Croatia, where low level of innovation performance in comparison to other countries is observed (see more EIS, 2008: 7). Furthermore, the results create an opportunity for the innovation policy implementation where stronger policy efforts should be made in the field of promoting foreign sources of knowledge through innovation and R&D programmes schemes in Croatia, as the results would imply.

Finally, the methodology could be further improved through additional econometric modeling i.e. multivariate analysis such as factor analysis and multiple regressions. In addition, since the level of innovative activities depends on the institutional framework further researches should make more emphasis on research taking into account the knowledge sources and its influence on local subsidiaries R&D and innovation activities. Furthermore, research about SME sector which includes majority of local subsidiaries and its innovation capacity should be advanced. The existence of innovation capacity is a prerequisite of developing and implementing innovation and R&D activities within these enterprises as well as increase opportunity to exploit external knowledge sources.

BIBLIOGRAPHY

- Aralica, Z., Račić, D., Redžepagić, D., (2009) **R&D activities as a growth factor of foreign owned SMEs in Croatia**, *Croatian Economic Survey*, 11, 73-94
- Axaroglou, K., (2007): **Multinational corporations and inertia in foreign direct investment flows**, *The International Trade Journal*, 21(4): 359-383
- Bellak, C., Leibrecht, M., Riedl, A. (2008): **Labour costs and FDI flows into Central and Eastern European Countries: A survey of the literature and empirical evidence**, *Structural Change and Economic Dynamics*, 19: 17–37
- Birkinshaw J., Hood N. and Jonsson S. (1998): **Building firm-specific advantages in multinational corporations: The role of subsidiary initiative**, *Strategic Management Journal*, 31, 141-54.
- Carayannisa, E.G., Popescu, D. (2005): **Profiling a methodology for economic growth and convergence: Learning from the EU procurement experience for central and eastern European countries**, *Technovation*, 25: 1–14
- Castro, G. M., Sanchez, P., Lopez, J.E. (2008): **Processes of knowledge creation in knowledge-intensive firms: Empirical evidence from Boston's Route 128 and Spain**, *Technovation*, 28: 222–230
- Chung, J., Bae, Z., Kim, J. (2003): **Changing patterns of technological cooperation activities of innovative small firms along technological development stages in the Korean telecommunication sector**, *Technovation*, 23: 163–173
- Cohen, W., Levinthal, D., A., (1989): **Innovation and learning: The two faces of R&D**, *Economic Journal*, 99, 569-596
- Costa, I., Filippov, S. (2008): **Foreign-owned subsidiaries: a neglected nexus between foreign direct investment**, *Industrial and innovation policies science and public policy*, 35(6): 379–390
- Damijan, J., P., Knell, M., Majcen, B., Rojec, M., (2003): **Technology Transfer through FDI in Top-10 Transition Countries: How Important are Direct Effects, Horizontal and Vertical Spillovers**, *William Davidson Working Paper, No. 549*, Ann Arbor: The William Davidson Institute at the University of Michigan Business School.
- Danneels, E., (2002): **The Dynamics of Product Innovation and Firm Competences**, *Strategic Management Journal*, 23(12):1095-1121
- Dunning, J.H. (1993): **Internationalising Porter's 'Diamond'**, *Management International Review*, 33(2): 7-15
- Dunning, J.H. (2000): **The eclectic paradigm as an envelope for economic and business theories of MNE**, *International Business Review*, 9: 163-190
- Eisenhardt K., M., Martin J., A., (2000): **Dynamic capabilities: what are they?** *Strategic Management Journal*, Special Issue 21(10/11): 1105-1121
- EIS - European Innovation Scoreboard (2008): **European Innovation Scoreboard 2007 Comparative Analysis of Innovation Performance**, *PRO INNO Europe*, European Commission
- EIZ – The Institute of Economics, (2007): **Transfer znanja pri izravnim stranim ulaganjima - rezultati istraživanja**, *Ekonomski Institut, Zagreb*
- Fahy, J., Hooley, G., Cox, T., Beracs, J., Fonfara, K., Snoj, B. (2000): **The Development and Impact of Marketing Capabilities in Central Europe**, *Journal of International Business Studies*, 31(1): 63-81
- Flores, R., Fontoura, M.P., Santos, R. (2007): **Foreign Direct Investment Spillovers in Portugal: Additional Lessons from a Country Study**, *The European Journal of Development Research*, 19(3): 372–390

- Globerman, S. (1996): **Conventional and Unconventional Wisdom about Canadian MNEs**, *The Canadian Journal of Economics*, Special Issue: Part 2, 29: 477-482
- Guan, J., Ma, N. (2003): **Innovative capability and export performance of Chinese firms**, *Technovation*, 23: 737-747
- Hooley, G., Cox, T., Shipley, D., Fahy, J., Beracs, J., Kolos, K. (1996): **Foreign Direct Investment in Hungary: Resource Acquisition and Domestic Competitive Advantage**, *Journal of International Business Studies*, 27(4): 683-709
- Holm U. and Deo Sharma, D. (2006), **Subsidiary marketing knowledge and strategic development of the multinational corporation** *Journal of International Management*, 12, (1), 47-66
- Hoskisson, R.E., Eden, L., Lau, C.M., Wright, M. (2000): **Strategy in Emerging Economies**, *The Academy of Management Journal*, 43(3): 249-267
- Johanson, J.; Vahlne, J.E. (1977) **The internationalization process of the firm - A model of knowledge development and increasing foreign market commitments**, *Journal of International Business Studies*, 8 (1) 23-32
- Keller, W., (2004) **International Technology Diffusion** *Journal of Economic Literature*, Vol. XLII: 752-782.
- Keller, W., (2002): **Geographical Localization of International Technology Diffusion**. *American Economic Review*, 92: 120-142
- Knell, M., Rojec, M., (2007) **The economics of knowledge and knowledge accumulation: A literature survey**, *Understanding the Relationship between Knowledge and Competitiveness in the Enlarging EU*, Framework Programme 6, European Commission
- Luo, Y., & Peng, M. W., (1999) **Learning to compete in a transition economy: Experience, environment, and performance**, *Journal of International Business Studies*, 30(2) 269-296
- Lundin, P., Frinking, E., Wagner, C., (2005): **International collaboration in R&D, structure and dynamics of private sector actors**", Interim Report 1 of Internationalisation of R&D – Implications to science and technology policy, ProACT programme: Gaia Group Oy & RAND Europe, http://proact.ktm.fi/index.phtml?menu_id=155&lang=3 [Accessed 20.01.2009]
- Madanmohan, T.R., Kumarb, U., Kumar, V. (2004): **Import-led technological capability: A comparative analysis of Indian and Indonesian manufacturing firms**, *Technovation*, 24: 979-993
- Meyer, K.E. (2004): **Perspectives on Multinational Enterprises in Emerging Economies**, *Journal of International Business Studies*, 35(4): 259-276
- Morionesa, A., Lopez, F. (2007): **A firm-level analysis of determinants of ICT adoption in Spain**, *Technovation*, 27, 352-366
- Murtha, T.P., Lenway, S.A., Bagazzi, R.P. (1998): **Global mind-sets and cognitive shift in a complex multinational corporation**, *Strategic Management Journal*, 19(2): 97-114
- Narula, R., Hagedoorn, J. (1999): **Innovating through strategic alliances: Moving towards international partnerships and contractual agreements**, *Technovation*, 19, 283-294
- Nassimbeni, G., (2001): **Technology, innovation capacity, and the export attitude of small manufacturing firms: a logit/tobit model**, *Research Policy*, (30) 245-262
- Palley, T.J. (2002): **The child labor problem and the need for international labor standards**, *Journal of Economic Issues*, 36: 601-615
- Račić, D., Aralica, Z., Redžepagić, D., (2008): **Export strategies as a factor of SME growth in Croatia**, *International Journal of Entrepreneurship and Innovation Management*. 8(3): 286-304
- Rugman, A.M., Verbeke, A. (2001): **Subsidiary-specific advantages in multinational**

- enterprises**, *Strategic Management Journal*, 22(3): 237-250
- Saarenketo, S., Puumalainen, K., Heiko, K., Kuivalainen, O. (2008): **Linking knowledge and internationalization in small and medium-sized enterprises in the ICT sector**, *Technovation*, 28: 591–601
- Sanna-Randaccio, F., and Veugelers, R. (2003): **Global innovation strategies of MNEs: Implications for host economies** in J Cantwell and J Molero, eds.: **Multinational Enterprises, Innovative Strategies and Systems of Innovation**, pp. 14-46, Cheltenham: Edward Elgar.
- Siotis, G. (1999): **Foreign direct investment strategies and firms' capabilities**, *Journal of Economics & Management Strategy*, 8(2): 251-270
- Sourafel, G., Greenaway, D., Wakelin, K., (2001): **Who Benefits from Foreign Direct Investment in the UK?**, *Scottish Journal of Political Economy*, 48, 119-133.
- Tiits, M. (2007): **Technology-intensive FDI and economic development in a small country – The case of Estonia**, *Trames*, 11(61/56), 3: 324–342
- Tylecote, A., Ramirez, P., (2005): **UK Corporate Governance and Innovation**, *Research Policy*, 34 (12).
- Uhlenbruck, K. (2004): **Developing Acquired Foreign Subsidiaries: The Experience of MNEs in Transition Economies**, *Journal of International Business Studies*, 35(2): 109-123
- Visintin, F., (2001) **Corporate Governance and Product Innovation: an Attempted Explanation of the Italian Industrial Specialisation**, http://diec.uniud.it/fileadmin/immagini/diec/wp_man/2001/wp03_01manag.pdf [Accessed 19.04.2009]
- Von Hippel, E., (1988): **The Sources of Innovation**, New York: Oxford University Press.
- Zhang, K.H. (2007): **International Production Networks and Export Performance in Developing Countries: Evidence from China**, *The Chinese Economy*, 40(6): 83–96