EXAMINING THE ROLE OF EXTERNAL BUSINESS FACTORS IN INTERNATIONALIZATION OF MANUFACTURING SMES – CASE OF CROATIA

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ABSTRACT: Internationalization represents an expansion of economic activity beyond the boundaries of domicile economy and includes export and import activities. Because it allows lowering costs by accessing a new suppliers or increase revenues by accessing new markets, it represents an opportunity for gaining competitive advantage for small and medium enterprises on both domestic and foreign markets. This paper empirically analysis effects of external business factors: location, availability of financing, competition and cooperation, on internationalization of SMEs in case of both export and import activities. Results from this research should help governments in determining key areas and measures for successful internationalization of manufacturing SMEs.

KEYWORDS: Internationalization, External Business Factors, Strategy, SMEs, Croatia

INTRODUCTION

Small and medium-sized enterprises are a key factor in economic growth and development (European Commission, 2013). They contribute to job creation and increase competitive pressure by introducing innovation, flexibility and speed of response to changes in demand. Also they force competitors to the increase their efficiency and innovation in the field of organization development processes and new products and/or services and markets, i.e. strength the competitive strength of the overall economy. At the same time, small and medium-sized enterprises face increasing market challenges, and most important is creating and sustaining competitive advantage. In that light internationalization presents an opportunity for creating and obtaining competitive advantage of small and medium enterprises at both domestic and foreign markets. Internationalization is often viewed explicitly as firm’s export activity that involves export, international licensing and franchising and foreign direct investment. But internationalization is not only exporting. For instance, crossborder cooperation, participation in profitable networks, search for competitive inputs or new technologies is important element in the modern SME drive into internationalization (European Commission, 2008). Therefore, in this paper both export and import activities of the enterprise are monitored and internationalization is viewed as a set of international activities that include relationships with suppliers and customers located
outside the boundaries of domicile economy by using structural and performance indicators. Due to competition increase on domestic markets SMEs have recognized the need to search new alternatives of gaining and maintaining competitive advantage. Most companies entered the process of internationalization to rationalize operating costs and to seek more favorable suppliers outside the domicile economy. Committed to reduce the costs, on foreign markets these companies found not only suppliers but labor, capital, technology and other production factors. On the other hand, many SMEs confronted with shortage of product life cycle searched for market where their products and/or services are still competitive and where demand still exists. Companies with a narrow niche production decided to enter the process of internationalization to reduce unit cost and achieve better business performance by increasing production.

Business strategy approach assumes that when considering the costs and benefits of different strategies company which entered internationalization process use a wide range of internal and external business factors (Kim and Hwang, 1992). Internal factors include enterprise-oriented factors or the firm’s resources (such as size, activities, experiences, etc.) and production factors (technology and product differentiation). External factors are related to the market characteristics and to the supply on the domestic and foreign markets (labor, accessibility and attractiveness of markets, cultural differences, availability of transportation, the strength of competition, etc.). According to research of Orser (2004) and SBA (2004), the export performance of enterprises is affected by many internal and external factors. External factors, or barriers, can be explained by the industrial organization theory and the influence of global factors. The strategic choice of enterprises depends on the analysis of the environment which is affected by the globalization and it is a cause of changes and increase in volatility. Some of these factors include: government regulation, competition, competitive orientation, threat of new competitors, entry barriers, customers, suppliers, customs procedures changes, etc. External factors can be: lack of managerial experience in the general and specific aspects of international activities, the lack of human resources and adequately qualified and experienced staff, inadequate access to finance and specialized credit lines, opportunities and threats, regulations, laws, etc., poor infrastructure (roads, ports, highways, telecommunications, etc.) and administration expenses. In this paper we will research following external factors: location, availability of financing, competition and cooperation.

LITERATURE REVIEW AND HYPOTHESES

Lately, researches on the internationalization of small and medium enterprises occupy the interest of many scholars (Rialp et al., 2005). These researches have a joint conclusion that SMEs are capable of seizing global market opportunities and they do it faster and more efficiently than large companies.

In the literature it is possible to notice the two streams of research. The first stream is focused on international business ventures, while the second is focused on the internationalization of small businesses. In both cases, scholars analyzed costs and benefits of internationalization (Autio et al., 2000; Zahra, 2005; Laudal, 2013; Sui and Baum, 2014). Earlier studies have specifically focused on the export processes and export performance (Dichtl et al., 1984; Miesenbock, 1988), while modern researchers are more focused on a
A wide range of internationalization processes and not only export (Coviello and McAuley, 1999).

**LOCATION AND INTERNATIONALIZATION**

Company location is defined by the company geo-strategic location and environmental conditions and consists from following indicators: the presence of institutional support in the region, the presence of clusters in the region, the availability of highly-skilled labor and transport connections.

For newly established enterprises, because of their short history and small size, the local environment is the primary source of necessary operational resources (Romanelli and Schoonhoven, 2001; Block and Wagner, 2010). Development of resources, within the local environment, leads to meeting the needs of industries that operate in the area (Maskell and Malmberg, 1999, Niosi and Bass, 2001; Bell and Zaheer, 2007; Bell and Deng, 2013) which subsequently leads to greater industry concentration and clustering (Bresnahan et al., 2001).

Resource benefits from geographical cluster locations along with the importance of resources in the internationalization process suggest that the greater availability of resources at particular location with a high concentration of industrial clusters allows new businesses to access needed resources for the business internationalization (Fernhaber et al., 2007).

Also, the existence of a supporting institutional framework at local and/or national level greatly contributes to the internationalization of small and medium enterprises (Lloyd-Reason, et al. 2004). Since the true value of companies are people who work in it, it is not surprising that firms locate in areas where they have access to highly-skilled workforce. Companies located at the crossroads of international traffic routes are facing lower costs of internationalization and therefore are more likely to become internationalized.

Consequently, the following hypothesis can be formulated:

**Hypothesis 1: Location has a positive effect on internationalization**

**AVAILABILITY OF FINANCING AND INTERNATIONALIZATION**

High costs of internationalization process are the most common reason for SMEs to remain in the domestic market (Skrtic and Mikic, 2009). These costs may include: the cost of foreign markets research, payment of legal advisory services, translation of documents, customizing products to foreign markets and travel expenses, as well as high business and financial risks. The financial investment needed to launch into the international arena can be a significant barrier to many SMEs and also the dynamic character of barriers means that difficulties will evolve with the degree of internationalization of the company (European Commission, 2008).

Small and medium enterprises face financial constraints that even further limit the
development of their international activities (Knight and Cavusgil, 1997). Most entrepreneurs in the "less attractive" industries and those who are at start up face with financing problem. Banks are reluctant to finance new and/or risky entrepreneurial idea, because most enterprises do not provide adequate collateral. In addition to giving collateral, when considering finance, the bank wants proof of a successful business or real evidence of stable sales and the ability of the product or service to generate adequate cash flows and ensure repayment of the loan. Business projects that are at an early stage of development usually do not have this.

This makes finances for internationalization a two-fold problem: on the one hand, gaining information on the new problems and financial mechanisms of internationalization and, on the other, having access to the additional funds required to finance international operations. Obtaining those funds will bring additional costs and difficulties due to the enhanced risk level perceived by the financial institutions and, in some cases, require the use of internationalization-specific financial instruments (European Commission, 2008).

Since the inadequate funding is basic problem of small and medium-sized enterprises and since internationalization process is very expensive, it is expected that companies with available multiple forms of financing (debt financing, equity financing, incentives, informal forms of financing) and with a large choice of financing terms (repayment period, the interest rate, the length of the grace period, etc.) will rather decide to internationalize.

Consequently, the following hypothesis can be formulated:

**Hypothesis 2: Availability of financing has a positive effect on internationalization**

**COMPETITION AND INTERNATIONALIZATION**

Competition in this paper is viewed from the aspect of the competitors’ internationalization degree. Strong local competition encourages companies to innovate, improve products, increase efficiency and reduce cost (Porter, 1990). If the company survives in strong competitive environment in the domestic market with the presence of foreign competitors, we can say that this company is competitive in global terms too.

Also there is a tendency of following the market leaders or imitate its strategy (Ito and Rose, 2002). According to this theory, organizations adopt experiences of others by transferring encoded experience in form of technology, procedures and similar routines. In competitive environment all this can be summed by the term of market leader imitation.

The dynamics of imitation depends not only on the amount of profit a company can make by following the experience of others, but also on the profit or loss that can be achieved by the market leader. If a market leader partly bases his competitive position on the strategy of internationalization, enterprises followers will try to reduce their business risk also by embracing the process of internationalization. Accordingly, in order to reduce the risk the company will imitate the strategy of market leader and the case of internationalization is not different. For these reasons the impact of competition, as an external business factor, in this paper is analyzed in terms of its positive impact on the process of internationalization.
of small and medium enterprises.

Consequently, the following hypothesis can be formulated:

**Hypothesis 3: Competition has a positive effect on internationalization**

**COOPERATION AND INTERNATIONALIZATION**

Internationalization of enterprises depends not only on the advantages of the company itself, but also on its business relationships and strategic alliances (Blankenburg and Johanson, 1992; Madhavan et al., 2004; Havila et al., 2004). These include direct links of the company with individuals, businesses, public agencies and non-profit organizations, etc., and indirect connections of these individuals or entities. The basic assumption of this model is that the individual firm is dependent on resources controlled by other companies and by cooperation they can get access to them.

A business network consists of two or more interconnected companies (Emerson, 1981) and it presents a source of market information and knowledge, and also allows rapid internationalization (Mitgwe, 2006). Business networks can significantly affect the process of business internationalization (Elli and Pecotich, 2001, Harris and Wheeler, 2005) by bearing minimal risk (Bell, 1995). These can be done by overcoming the shortcomings of internal resources (Young, 1989) or inadequate resources (Bjerkman and Forsgren, 2000). In the process of internationalization business network can help to cope with market ignorance and psychic distance (Chetty and Blankenburg Holm, 2000) and the lack of size (Rulahobya and Jaensson, 2004). Business networks also allow businesses to enter foreign markets with "frog jumps" (Hertz, 1996).

Cooperation represents all forms of linking with universities, research institutions and other businesses with the purpose of developing new products and/or services, new processes or joint sales. The aim of the cooperation is the convergence of the involved parties by a usage of the needed information in order to create links with customers, suppliers, industry, retailers, government regulatory agencies and other market participants.

In cooperation with universities and research institutions, entrepreneurs and managers in small and medium-sized enterprises can get access to the latest scientific achievements by transferring knowledge and technology from a scientific framework in the enterprise. The cooperation is usually accomplished through a variety of practice programs, in which students can acquire practical knowledge about business and entrepreneurs and/or managers can gain insight into the latest scientific findings. Universities and research institutions can be used as a source of new knowledge and intermediary institutions (between state development agencies and technology parks) transferring new knowledge to businesses and individuals who know how to use it (Goldstein and Renault, 2004; Goldstein and Drucker, 2006, Bramwell and Wolfe, 2008, Vogel and Keen, 2010).

But to take advantage of the knowledge, entrepreneurs and/or managers must be able to identify opportunities and possess specific capabilities of absorption (Robernik et al., 2006). If there are any weaknesses in the process of generating knowledge, spill-over
effects and absorption will result in innovative inefficiency. If universities and research institutions produce, but do not transfer that knowledge to the entrepreneurs, the knowledge remains only in terms of science, and not practice (Thursby, 2002). The same problem occurs if there are no mechanisms for knowledge transfer, absorption capacity or willingness of local entrepreneurs to cooperate.

The biggest obstacle of cooperation between universities and research institutes, and enterprises are limited information that they have about each other (Szerb i Imreh, 2007). Most business owners and/or managers sees universities as a places of instruction, while at the same academics are not familiar with the business needs and potential business applications of their research.

An increasing number of small and medium-sized enterprises decide to collaborate with their competitors, which confirms the thesis that rivalry among competitors is no longer a barrier to collaboration (Kuhn, 1996). Internationalization as a tedious process can pose too big of a challenge for one company so companies by cooperation with rivals are trying to get up to date information and knowledge on important tangible and intangible resources (Luo, 2004). Competitors have this information because they do business in the same industry and the same marketplace. It is not a rare situation in which two companies on the domestic market appear as competitors, while on foreign market are acting as a partners (Bengtsson and Kock, 2000).

Cooperation with competitors is viewed from the point of competitiveness growth and creating new opportunities that arise from this collaboration (Ganguli, 2007). In accordance with the assumptions of the model of cooperation, the business internationalization allows the access to complementary resources, competencies and capabilities of business partners (Lejpras, 2009). Cooperation within the business internationalization framework contributes to increment of the firm’s export activities (Holmund et al., 2007) regardless achieved "strength" of cooperation (Knock et al. 2010).

Consequently, the following hypothesis can be formulated:

**Hypothesis 4: Cooperation has a positive effect on internationalization**

**METHODOLOGY**

**SAMPLE**

The population of this study consists of all Croatian manufacturing SMEs. A small enterprise is defined as an enterprise with up to 50 employees, while the medium-sized enterprise employs 50-250 employees. Size data of the company are available in the Register of the Croatian Chamber of Commerce.

Manufacturing SMEs are subject of this study because of its high correlation to other industries and because most of the previous researches have shown that most manufacturing companies have access to more capital than service companies and therefore are more internationalized (Roberts, 1999). The original sample of this empirical research
makes 800 small and medium-sized manufacturing enterprises. The sample was selected randomly and the sample corresponds to the population, i.e. company distribution by business activity is the same in the sample as in general population. The survey was answered by 88 respondents which is enough to conduct multiple linear regression.

Regarding the business size of the respondents, 54.55% (n=48) were small firms and 45.45% (n=40) medium sized firms. They most common business activities are: manufacture (46%), water supply and waste management (17.5%), agriculture, forestry and fishing (10%) and construction (8%). In average, questioned entrepreneurs have business experience of 16.68 years. They entered entrepreneurship with 3.31 years of business experience in average. Regarding the level of internationalization of the respondents, 64% are active in international relating, i.e. have export and/or import activities, and 36% are doing business specifically within Croatian territory.

**VARIABLES**

External business factors

For measuring the determinants of firm’s internationalization a theoretical approach to business strategy, i.e. the division on the internal and external business factors was used (Lejpras, 2009, Clark and Mallory, 1997). Determining external business factor was done by using five-level Likert item scale. External business factors include: location, availability of financing, competition and cooperation. To measure the external business factors we used four measuring scales with respective items (Table 1.).

<table>
<thead>
<tr>
<th>Location</th>
<th>Existence of institutional support in the region</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Availability highly-skilled workforce</td>
</tr>
<tr>
<td></td>
<td>Existence of the clusters and/or different types of grouping business activity</td>
</tr>
<tr>
<td></td>
<td>Good traffic connections of business location</td>
</tr>
<tr>
<td></td>
<td>Existence of institutional support to the export in the region</td>
</tr>
<tr>
<td>Availability of financing</td>
<td>Existence of special program for financing export activities</td>
</tr>
<tr>
<td></td>
<td>Availability of numerous sources of financing</td>
</tr>
<tr>
<td></td>
<td>Availability of numerous terms of financing</td>
</tr>
<tr>
<td>Competition</td>
<td>Competitors operate on foreign markets</td>
</tr>
<tr>
<td></td>
<td>Competitors export to foreign markets</td>
</tr>
<tr>
<td></td>
<td>Competitors import from foreign markets</td>
</tr>
<tr>
<td>Cooperation</td>
<td>Existence of cooperation with universities in order to develop new product and/or service and new processes</td>
</tr>
<tr>
<td></td>
<td>Existence of cooperation with research institutions in order to develop new product and/or service and new processes</td>
</tr>
<tr>
<td></td>
<td>Existence of cooperation with other enterprises in order to develop new product and/or service, new process or joint sale</td>
</tr>
</tbody>
</table>

**Table 1. External factors measuring scales**
Internationalization

Since in this paper internationalization is defined as all firm’s import and export activities it was necessary to adjust the existing indicators of internationalization in large enterprises (Dorrenbacher, 2000; Sullivan, 1994). As an indicator of internationalization, internationalization index is used and it consists of structural indicators and performance indicators. Structural indicators include following indicators: a. the number of countries where the company operates, b. the number of international strategic alliances, c. the number of international franchises and d. the number or proportion of foreign suppliers. Indicator of performance include following: a. exports income, b. share of export revenue in total revenue, c. liabilities to foreign suppliers and d. share of foreign supplier liability in total supplier liability. As the performance indicators consist of data that entrepreneurs/managers are not willing to voluntarily give, subjective measures of performance were used, i.e. the instrument of success weighted average (Colvin, Slevin, 1991), which is actually a derivative of the instrument developed by Gupta and Govindarajan (1984).

ANALYSIS

Evaluation of metric characteristics of applied measurement scales is carried out in order to assess the reliability, convergent and discriminant validity of used measurement scales. Reliability, defined as the degree to which the measurements are error-free and result with consistent results, is measured by the most popular measure of the internal consistency of a set of assertions, Cronbach alpha coefficient. Testing converged and discriminant validity of a applied measurement scales is conducted by exploratory factor analysis with varimax rotation of factors. Multiple linear regression method is used for the prediction of the dependent variable on the basis of the insights that can be obtained from a number of independent variables and for determining the nature and relationship between these variables and the variables used to measure the quantitative scale. Standard methods of multiple linear regression is used and all independent variables entered into the regression equation simultaneously in order to explore the relationship between the entire set of independent variables and the dependent variable. For the evaluation of the strength of relations among variables the regression coefficients and t-test is used.

RESULTS

Reliability analysis of measurement scales (Cronbach alpha coefficient) suggests that the location scale consists of: existence of institutional support in the region, existence of the clusters and/or different types of grouping business activity and existence of institutional support to the export in the region. Availability of finance scale is determinate by availability of numerous sources of financing and availability of numerous terms of financing. Competition scale consists of competitors operating on foreign markets competitors exporting to foreign markets and competitors importing from foreign markets. Cooperation scale includes cooperation with universities and cooperation with research institutes in order to develop new product and/or service and new processes

After determining the reliability of measurement scales we approached to the assessment
of convergent and discriminant validity of the applied measurement scales by conducting an exploratory factor analysis. According to the results of the factor analysis (Table 2.), external business factors can be interpreted as the four factors: availability of financing, competition, cooperation and location.

| Availability of numerous sources of financing | 0.918482 |  |  |  |
| Availability of numerous terms of financing | 0.908420 |  |  |  |
| Competition is present on foreign market |  | 0.893278 |  |  |
| Competition is internationalized (import) |  |  | 0.929239 |  |
| Competition is internationalized (export) |  |  |  | 0.894941 |
| Regional institutional support |  |  |  | 0.782355 |
| Cluster presence |  |  |  | 0.764965 |
| Institutional export support |  |  |  | 0.874260 |
| Cooperation with universities |  |  |  | 0.896051 |
| Cooperation with research institutes |  |  |  | 0.928686 |

Table 2. Factor structure of the external business factors (Varimax factor rotation)

Factor analysis results suggest that the applied measurement scales have convergent properties (related claims have a high factor loading on the appropriate factors) and discriminant validity (corresponding claims have low factor loadings on other factors). Three extracted factors explain 82.09% of the total variance (Table 3.).

<table>
<thead>
<tr>
<th>Factor</th>
<th>Eigenvalue</th>
<th>Cumulative eigenvalue</th>
<th>% of explained variance</th>
<th>Cumulative % of explained variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3.432723</td>
<td>3.432723</td>
<td>34.32723</td>
<td>34.32723</td>
</tr>
<tr>
<td>2</td>
<td>2.184163</td>
<td>5.616886</td>
<td>21.84163</td>
<td>56.16886</td>
</tr>
<tr>
<td>3</td>
<td>1.429306</td>
<td>7.046192</td>
<td>14.29306</td>
<td>70.46192</td>
</tr>
<tr>
<td>4</td>
<td>1.163498</td>
<td>8.209690</td>
<td>11.63498</td>
<td>82.09690</td>
</tr>
</tbody>
</table>

Table 3. Eigenvalues and total variance
The outcome of a multiple linear regression using method of least squares (Table 4) show estimated equation model of the impact of internal business factors on internationalization of enterprise as follows:

\[ \hat{Y} = -0.81 + 0.14 \times AF + 0.13 \times COM + 0.25 \times L + 0.17 \times COO \]

\( Y = \) internationalization
\( AF = \) availability of finance
\( COM = \) competition
\( L = \) location
\( COO = \) cooperation

<table>
<thead>
<tr>
<th>N=88</th>
<th>Coefficient</th>
<th>Standard deviation</th>
<th>t(85)</th>
<th>p-level</th>
</tr>
</thead>
<tbody>
<tr>
<td>alpha</td>
<td>-0.806469</td>
<td>0.250848</td>
<td>-3.21498</td>
<td>0.001859</td>
</tr>
<tr>
<td>DF</td>
<td>0.147207</td>
<td>0.083446</td>
<td>1.76411</td>
<td>0.081393</td>
</tr>
<tr>
<td>K</td>
<td>0.130154</td>
<td>0.062262</td>
<td>2.09043</td>
<td>0.039639</td>
</tr>
<tr>
<td>L</td>
<td>0.252650</td>
<td>0.095164</td>
<td>2.65489</td>
<td>0.009509</td>
</tr>
<tr>
<td>S</td>
<td>0.171928</td>
<td>0.068619</td>
<td>2.50556</td>
<td>0.014180</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Statistics</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multiple R</td>
<td>0.58548</td>
</tr>
<tr>
<td>Multiple R(^2)</td>
<td>0.34279</td>
</tr>
<tr>
<td>Adjusted R(^2)</td>
<td>0.31111</td>
</tr>
<tr>
<td>F(4,83)</td>
<td>10.82271</td>
</tr>
<tr>
<td>p</td>
<td>0.00000</td>
</tr>
<tr>
<td>Std.Err. of Estimate</td>
<td>0.69142</td>
</tr>
</tbody>
</table>

Table 4. The outcomes of the multiple linear regression (internationalization/external business factors)

Results show that there is positive and very significant influence of external business factors on business internationalization (F (4,83)=10.82271, p<0.001) . Availability of finance (numerous sources of funding and financing conditions), as a first order variable, has a positive effect on business internationalization (r = .14, p< .09). Level of internationalization of competitors (export and/or import activities), i.e. competition also has a positive effect on business internationalization (r = .13, p< .04). Regarding location it can be concluded that availability of institutional support in the region, the existence of clusters and/or other forms of economic activities concentration and the existence of institutional support to exports have positive effect on business internationalization (r = .25, p< .01). At the end, cooperation with universities and research institutions in order to develop new products, services or process also has a positive effect on SMEs internationalization (r = .17, p< .02).
CONCLUSION

Internationalization of small and medium sized enterprises represents the instrument for gaining competitive advantage by access to new markets (export activities) and access to foreign suppliers (import activities). External business factors that encourage business to internationalization are: location, availability of financing, competition and cooperation.

The most important positive contribution to the internationalization of Croatian small and medium manufacturing enterprises provides location: availability of institutional support in the region, the existence of clusters and/or other forms of economic activities concentration and the existence of institutional support to exports. This confirm the thesis that companies located in the regions with developed institutional frame for encouraging SMEs development and supporting export activities are more likely to internationalize. Also, regional clusters allow new businesses to access needed resources for internationalization.

The existence of co-operation between enterprises, universities and research institutions in developing new products, services, new process also has a positive effect on SMEs internationalization. It is shown that competition has a positive impact on internationalization and that Croatian manufacturing SMEs in order to reduce business risk imitate the market leader strategy, and internationalization is not a different, whether it be on in the form of import or export activity.

Also, numerous sources of funding as well as the financing conditions have a positive influence on the internationalization SMEs. This is not surprising as the financing present one of the key problems in developing Croatian SMEs. As banks are reluctant to finance new and risky entrepreneurial idea and internationalization due to high costs can be considered as risky activity, the government in cooperation with financial institution or alone has to find way to overcome this obstacles.

The above results of empirical study analysis suggest that when creating the economic policy the government has to take into account the conditions and modalities of SMEs financing, foster competition, cluster development and cooperation, so that the process of internationalization of small and medium enterprises can indeed be in the function of increasing their productivity and business performance.

REFERENCES


