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Evaluation Success Models of SMEs in theInternationalization Process

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1. Introduction

Recently we have experienced acceleration and deepening of the globalization process on a global scale, which largely affects the operation and development of businesses around the world. Its impact on the functioning of the economy is unquestionable. Globalization is closely linked to the companies' internationalization and to the multinational companies' development, since the removal of barriers and increasing competition in domestic markets is reflected in the companies' efforts to expand into foreign markets. With increasing globalization and the increasing competitive environment, enterprises must respond quickly to these changes, especially SMEs.

However, while globalization is essentially a spontaneous process, the process of integration is a process in a controlled and organized form by international or supranational institutions and bodies (without taking into account the existence of so-called informal integration). In the context of globalization a global economy is gradually and spontaneously created. Increasing role of foreign trade and foreign investment, a combination of financial markets and concentration of capital and multinational corporations are still significantly affecting economic affairs. Their political influence is also strongly promoted. And especially the internationalization becomes more and more important in an open Czech economy.

In an economic grouping of the EU, SMEs has important socio-economic and political role. This is because of multiplicity, role in providing the necessary employment, social stability and dynamics of innovation development. Therefore it is given constant attention to the SMEs development. Also economic legal and organizational support is constantly emphasized. Incorporation of SMEs in the Czech EU integration represents advantages because Czech SMEs are part of the advanced economic environment. This opens up new business opportunities. It provides an access to a large market without internal borders of the EU. It also increases the legal protection of enterprises and improves the investment in the EU. Other merits for SMEs arise out of Czech membership in the European Union.

It has been argued that the driving forces of globalization have influenced, at least partly, the internationalization of SMEs. It is true, that they have diminished the barriers (Fletcher, 2000; Knight, 2001). The increasing speed of business operations has also had an effect, as SMEs start operating internationally faster than previously. Finally, increasing competition has reduced the ability of SMEs to control their own developmental paths (Etemad, Wright, & Dana, 2001). For small and medium-sized enterprises is very important to know, in any event, which factors are the key factors for their success in the internationalization process. There are

presented many theories in the current literature on which it is generally possible to determine, which factors are important to SMEs in the internationalization process. Not many simple models, which have to be for small and medium-sized businesses, helped to assess their particular situation. The authors of this paper therefore focused on creating a simple model to help SMEs assess their situation in the internationalization process. Proposed model can help small and medium-sized businesses in two ways. Not only to assess the companies' position in the internationalization process and show the ranking of their internationalization process key factors, but the model can also help companies to compare their situation with competitors. With the proposed model, SMEs can easily discover in what areas they have their strengths and in what areas they have their weaknesses. Knowing this fact it can help them to work on improving weaknesses.

However, SMEs often have difficulty to determine the areas, in which they have to improve the situation to be more successful in the internationalization process. Therefore authors decided to focus on creating of a simple evaluation model that will clearly demonstrate the areas in which SMEs do well and areas in which SMEs have reserves. The model should also expose, what specific particular quantitative and qualitative factors are affecting the success of each company. To sum it all up - the aim of this paper is to show a draft of a simple evaluation system, which can help SMEs evaluate their key factors of the success in the internationalization process.

Internationalization of the firms is generally defined as the involvement in the international environment. The concept of internationalization varies widely by various authors in the various literatures. Beamish understands internationalization as a process by which firms increase their company awareness usually it has direct or indirect effects of internationalization transactions on their future. They also create and manage transactions with other countries (1990, In: Pollard, Šimberová). Internationalization is one of the most persistent trends shaping the world economy. Its content is the establishment and deepening of economic relations between different countries, based on the gradual elimination of various barriers and converting some old national events on the international effects (Kunešová, Cihelková, 2006).

According to Majerová (Majerová, 2007) the internationalization process of continuous and progressive interconnection of economies in the world economy runs through an expanding network of international relations. The process of internationalization can be also defined as "the increasing process involved in international operations" (Welch, Luossstarinen; 1988). To perfectly fit the international environment, the process must contain the adaption of firm operations such as strategy, structure, resources etc... Furthermore, the degree of internationalization can be measured as foreign sales revenues relative to total sales revenues (Welch, Loustarinen; 1988). According to Pelmutter business decision of international activities depends mainly on the corporate culture, shared values and the corporate management style (Pelmutter 1969 in Machková 2009). The EPRG framework defines the main management styles - ethnocentric, polycentric, geocentric and regiocentric. The internationalization process can be described as a gradual development taking place in distinct stages (Melin, 1992).

The international process can be clearly identified under two major schools: the models initially developed by Johanson and Wiedersheim – Paul, 1975 and Johanson and Vahlne, 1977, referred-to as Uppsala models (U-models) and the Innovation-Related internationalization models (I-models) conceptualized by Cavusgil 1980. Both the I-models and the U- models emphasize on firm's involvement in foreign market segments. Both of the models view internationalization as a gradual incremental process. U-model is more

often featured in the international business literature. The entering of new markets by the company is usually perceived as a psychically closer. Many companies do not follow incremental stage approach but it is often reported that they start their international activities immediately after their establishment (Anderson et al., 2004). Literature defines them as "born globals" (e.g. Oviatt, McDougall; 1997). However, the "born global" phenomenon is relatively new phenomenon in the International Business. This phenomenon is described in a lot of international literature, e.g. Knight and Cavugsil (1996) define "born globals" as "small technology oriented companies that operate in international markets from the earliest days of establishment".

It is possible to find out various classifications of internationalization models in the literature. For example Li, Li and Dalgic (2004) divide theoretical approaches to internationalization processes into 3 main groups: the first is called "Experiential Learning", where theories of Johanson and Vahlne, or Lam and White or Cavusgil can be involved. The second group can be called "Systematic planning" (Root, 1987; Miller, 1993; Yip, Biscarri, Monti; 2000) and the third group involves theories from e.g. Welch, Boter and Holmquist or Coviello and Munro. This group of theoretical perspectives can be called "Contingency perspective".

In last few years there are many other authors who criticize all of these theoretical models of international process and they try to put all known approaches together and develop some hybrid models of internationalization process. E.g. LI, Li and Dalgic 2004 compare different theoretical perspectives and bear normative implications for managers. In their opinion this hybrid models can help examine, especially to SMEs, the internationalization process. The process of internationalization of small and medium – sized enterprises is different to the international process of MNEs. SMEs have usually limited resources; they have less international experience than multinational MNEs and they often have to respond to international market opportunities in a very timely manner.

The paper deals with evaluating the success of small and medium-sized enterprises in the foreign market. In this paper two evaluation models are discussed. These models can be used by SMEs to determine how strong they are compared to competitors, where companies have strength and weaknesses. They can also identify their key success factors in the process of internationalization. A lot of SMEs have problems to identify the key success factors in the process of internationalization. They have also problems with determination of area, in which they can succeed in foreign markets. They have difficulties with determination of their strengths and weaknesses; therefore we decided to focus on this problem. There is presented a two simple performance models proposal of small and medium-sized enterprises' evaluation.

2. Evaluating the success of small and medium-sized enterprises in foreign markets

SMEs in the Czech Republic as well as in the other countries of EU play very important role in the international arena. In the last three decades it led to an increase of the SMEs number relative to large firms. SMEs have become an important market sector of the economy. Nowadays the driving force depends on the business growth, innovation and competitiveness. SMEs are also an important factor in providing job opportunities. In the Czech Republic 61.52% of SMEs are involved in the creation of jobs and 35.17% of the GDP. Economic and social benefits of SMEs are characterized by several factors. These include in particular: mitigating the negative effects of structural change, acting as subcontractors for large firms, creating conditions for the development and introduction of new technology,

creating jobs at low capital cost, quickly adapting to the requirements and market fluctuations. They are a source of innovation and technological progress, they employ nearly 60% of active workers, they involve more than half of GDP, they complete peripheral areas of the market that are not attractive for larger businesses, they decentralize business activities and help accelerate the development of regions, towns and villages.

Small and medium-sized businesses have many advantages in the market, but they must face number of negative effects. The advantages of SMEs are as follows: the simple organizational structure that brings lower costs for company management and reduce bureaucracy, the setting up of the company capital is usually not as demanding as it is for large enterprises. Then there is flexibility - small and medium-sized businesses can react faster and more sensitively to changes than large corporations (with even greater flexibility and ability to improvise). Another advantage of SMEs is lower demand for energy and raw materials, SMEs also seek for small niche markets easier and adapt better to local markets. They can address the needs of individual customers. One positive aspect is also personal and direct contact with the company owner and other employees. The possibility of maintaining personal contact with customers is also a privilege. SMEs are considered as vectors of a large number of innovations.

The disadvantages of SMEs include greater difficulties to access foreign capital than larger companies. SMEs are unable to participate in a business where large investments are needed. They often have a weaker position in the bidding for government contracts; they cannot afford to hire top professionals and scientists. They have limited resources for promotion and advertising, their market share is low and often threaten. Threats of SMEs: it is easier to fall into insolvency, especially in cases of their customers' insolvency. SMEs have also major problems with entry in foreign markets, because they have lack of sufficient information regarding to foreign legislation, potential partners, the new market, and the availability of counselling services is at a lower level.

SMEs, unlike large multinational companies, do not have the vast resources and cannot afford to carry out extensive analysis and evaluation of foreign market opportunities, but they must spend their resources more effectively. Because of limited resources, which are a typical feature for SMEs, it is necessary to propose such evaluation models, which both provide valuable information for SMEs and are not resource-intensive. One way to facilitate SME business in foreign markets is to identify key success factors of enterprises in foreign markets using international performance evaluation models for SMEs.

2.1 Comprehensive evaluation model of corporate success

Under this method is designed a comprehensive evaluation model for small and mediumsized export firms. The indisputable advantage of the proposed evaluation system is its simplicity and the possibility of graphic representation. This facilitates the subsequent comparison of individual enterprises. Another indisputable advantage is the easy modification of particular parts of the evaluation model and adaptation to specific sectors. The assessment is divided into four areas; each area contains a number of thematically related questions. Exact distribution is shown in Figure 1.

The whole rating system is based on the assumption that each block of questions (key staff, internationalization, international orientation, performance IP) has the same weight in the scoring system, where for each block pertains the same number of points. To facilitate the evaluation, the total number of points was selected on a particular block. The points were in the amount of 120.

There are two parts in the basis for scoring. Structured questionnaires, which are divided thematically to provide answers to each question shown in Figure 1. And a publicly available documents of the company, which are integral part of the basis for scoring. The point system is based on a subjective assessment of respondents and is supplemented by objective data from the annual reports of companies. Each block contains four questions, respectively the maximum number of points per question is 30 points (120 / 4 = 30). Each question has a number of possible responses, according to the author's view, "the best" option gets the maximum amount of points, which gradually decreases with less appropriate response.

Key employees

- Language skills of key staff
- Previous experience of key staff in foreign trade
- Training or courses in foreign trade area
- Percentage of key staff

Internationalization

- Form of entry on foreign markets
- Time in years since the company's establishment till the entry into foreign market
- Number of countries to which the company exports
- Countries where the company exports

International Orientation

- Standardization of exported product
- Standardization of marketing
- Information about the target market before exporting
- Frequency of management communication with foreign partners

Return VA (performance)

- The share of foreign sales to total sales
- Percentage of products sold abroad to total goods sold
- Rate of return (profitability) of foreign operations
- Revenues per employees from international activities

Fig. 1. General evaluation model of the company's success

2.1.1 Evaluation description of particular questions

The first block of questions is related to the level of internationalization of small and medium-sized enterprises and includes the following questions:

- To determine the form of entry into foreign markets, the respondent is asked the following question: What form does your company use to enter into foreign markets? Maximum number of points gets the answer "foreign direct investment", since it is the highest and most demanding form of entry into foreign markets. On the contrary, the answer "indirect export" is the basic (lowest) form of input, and therefore the answer has assigned a minimum score.
- To determine the time since company's establishment till the entry into foreign market, the respondent answers the following question: How many years after the company's establishment did the company enter into international market? The highest rating is

- assigned to companies that entered the market immediately after their formation, because these companies have operated in the foreign market since their inception, so compared to other companies they enjoy the competitive advantages. The counterparts of these companies are enterprises, which spent more than 10 years in the domestic market and only after this time, they decided to enter the foreign market.
- To determine the number of countries to which the company exports its products was the following question: To how many countries does your company export the production? - An open question that offers no options and the answer depends on the actual number of countries in which the company operates. It was necessary to adjust these responses and include companies into ready-made intervals depending on the number of countries in which they are economically active. When creating each interval there were taken into account the psychological and cultural differences and geographical distances between countries. Evaluation is based on the assumption that export into a large number of countries is more complex than the export into a small number of countries. It is not only for logistical reasons but also due to cultural and linguistic differences. Therefore, the most points are assigned to companies exporting to more than 36 countries. On the contrary the lowest number of points obtained the interval of 1-4 countries, where export demand is not so high. There is a high probability that these are the neighbouring countries of the Czech Republic. The drawback of this assessment is the situation, where the company exports into a small number of countries, but which are geographically distant and culturally different. This deficiency is offset by the following question, on its basis the specific territory where the company exports its products is established and evaluated.
- To determine the territories, where the company exports its production, the respondents answer the following question: To which countries does your company export its production? Semi-closed question where the individual variations of responses were compiled in a following way: The least-intensive export is considered export to Slovakia, a little more demanding export is to neighbouring countries of the Czech Republic, then further to EU, including the European Economic Area, the next step, in light of specific conditions in the existent markets, can be regarded as export to Russia and countries of the former USSR, former Yugoslavia (except Slovenia) and Albania. The second most difficult territory to export from the Czech SMEs point of view according to the authors is considered the U.S. and Canada, primarily due to greater distances. The most difficult territory can be considered as rest of the world variant. This group include the countries geographically and culturally most distant to the Czech Republic, therefore this response is assigned the highest value.

The second group of questions deals with the profitability of foreign trade enterprises, and is composed of the following questions:

- The proportion of foreign sales revenues to total company's sales revenues is investigated using a structured questionnaire, the question is: What is your company's proportion of foreign sales revenues to total sales revenues? Maximum points will receive "91-100%", because these firms can be considered the most foreign market oriented.
- To determine proportion of foreign sales revenues to total company's sales revenues respondents have to answer the following question: What is the percentage of products/services sold abroad to a total volume of products sold? Even in this response, the maximum assigned rating is "91-100%", because the larger the percentage, the greater the involvement of business in foreign market.

- To determine the profitability of foreign operations, respondents are asked whether the foreign operations are profitable. For this question only three variants of answers are offered, of which the highest rating achieves the company, which responds that foreign operations are profitable. The second option was the answer, they are not profitable, but earnings are expected in the near future. As an option with the lowest score was a response that business operations in foreign countries are not profitable.
- To find the foreign sales revenues per employee, there are publicly available documents of inquired companies. - Each company generates a different amount of foreign sales revenues depending on the degree of involvement in international activities. The amount of sales revenues also affects the size of the company and this affects negatively the explanatory power of this indicator to compare companies within the industry. To have more informative value from the comparison of the foreign sales revenues level, it is necessary to adjust the indicator of value and compare the amount of foreign sales revenues per one employee. The adjusted indicator is possible to compare. It is necessary to create an assessment scale, so that each firm could be rated by appropriate number of points. Therefore it is necessary to determine the average amount of foreign sales revenue corrected to one employee at the surveyed companies, and on the basis of the average amount of sales revenue to compile the assessment scale. The maximum number of points corresponds to the situation where foreign sales revenues per employee are higher than the industry average that a company achieves above-average amount of foreign sales revenues and it is expressed per one employee. On the contrary, the minimum points obtains such response, where foreign sales revenues per employee are below average.

The third group of questions deals with international marketing and includes the following questions:

- In the first question it is determined the standardization degree of the product exported, and the answer is obtained using the question: What is the adjustments rate of your exported products and / or services to the target market? The highest number of points obtains the answer "very high", because it means that the company has made significant efforts to adapt their products to target market conditions. The lowest points were assigned to respond "low" level of adaptation.
- To determine the standardization of marketing the respondent answers the following question: What is the degree of adaptability to individual export marketing areas? The highest number of points will be for response "very high", because it means that the company has made considerable efforts to adapt marketing to target market conditions. The lowest points were assigned to respond "low" level of adaptation.
- Information gathered prior to the market entry are necessary for the formation of an appropriate strategy, i.e. to select the appropriate marketing tools, to eliminate or reduce the risk of failure, to exploit the potential which the existent market offers and to prepare other activities related to entry to given market. To determine the amount of information that the company had prior to the market entry, it is possible to use the following question: What information did the company have about the target market prior to the commencement of goods or/and services export? At this response we pursue the number of selected answers. In the questionnaires there are stated 5 options and 6th variant contains a blank box, where the respondents can write their own answer. The more information the company had prior to export, the more points they receive.

• Frequency of management communication with foreign partners is determined by using the question: How often does your company's management communicate with foreign partners regarding the export of products and / or services? - Maximum number of points will receive a response "daily", reflecting the high intensity of the relationship of the company with foreign business partners. On the contrary the lowest number of points will be attributed to the response "once a year."

The last set of questions deals with key employees issues:

- Language skills of key staff are identified through the question: What foreign languages do your key employees speak? The better the language skills of key staff, the higher the score. We assume that if a company employs workers with good language skills, it simplifies the entry and subsequent business on foreign markets.
- To find the previous experience focused on foreign trade transactions we use this question: What is the previous experience of your key employees in foreign trade? The more experience gained from previous jobs, the greater the number of points. The premise is similar to the previous answers. Employees with more experience in foreign trade shall facilitate the operations of business in foreign markets.
- Training, seminars and courses can help acquire the knowledge of foreign territories especially to less experienced workers. It can also improve language skills and overall assistance in carrying out foreign trade operations. The information needed to evaluate this section is obtained using the following question: How often do the key employees participate in training courses or courses contributing to improve knowledge and skills in the field of foreign trade? The question has 3 variants. The highest rating is for the possibility that key employees are involved in training "regularly". The least points receive the respondents with answer 'Never', i.e. situation where the company does not increase the expertise and skills of their key employees.
- Proportion of key employees who are involved in the foreign activities more than 50% over the total number of employees is obtained using the following question: What is the percentage of employees that are involved in more than 50% of the foreign activities over total number of company's employees? The question assumes that there is a positive correlation between the proportion of key employees engaged in foreign trade and the size of foreign sales revenues. This correlation was verified on the basis of previous research.

For example, the questions listed in Table 1 are based on the assumption that there exist a relationship between the percentage of key employees and size of foreign sales revenue. This correlation was verified by testing hypotheses. The maximum number of points is assigned to the variant of 75 - 100% while the lowest score to 0 - 25%.

Point rating system		
Group of questions	answer	points
Key employee	4	120
	0 - 25%	7,5
What is the percentage of employees that are involved in more than 50% of the foreign activities of your business?	26-50%	15
	51-75%	22,5
	76-100%	30

Table 1. Example of point rating system

2.1.2 Graphical presentation of evaluation model

The indisputable advantage of the proposed success evaluating system of SMEs is the possibility of graphical presentation. It is a graphical image which enables easy comparison of rating success among individual firms. Graphical image is based on the above-defined score. The requirements for the graphical presentation are particularly: an easy interpretability and feasibility of results. Graphical demonstration of individual companies' evaluation is based on the counting of points in existent quadrants from which the position data are plotted on four axes. Combining the position date a rectangle comes up. This rectangle is specific to each company. By obtaining this graphical demonstration it makes it easier to compare companies among themselves, and also it is easy to identify areas in which are the companies successful. For more informative comparison of the enterprises value, it is necessary to add numerical values to a graphical presentation that will enable to determine the order of particular companies according to the respective blocks.

One of the possibilities of a graphical presentation is so called 'perfect company', which reaches the maximum number of points in all quadrants i.e. 120 points (Figure 2). Defining the "perfect company" will partly increase the informative value of graphical presentation of the evaluation and further it will help us to set the appropriate numerical rating.

Graphical presentation of a perfect company is obtained by counting up the maximum score of all questions and plotting the resulting sum to the axes of the particular quadrants. Thus we get the position date of a perfect company, by its merger will be created a square showing the highest possible score of the proposed model in all blocks. Presentation of perfect company in comparison to resulting evaluation of surveyed company will increase the informative value of graphical model.

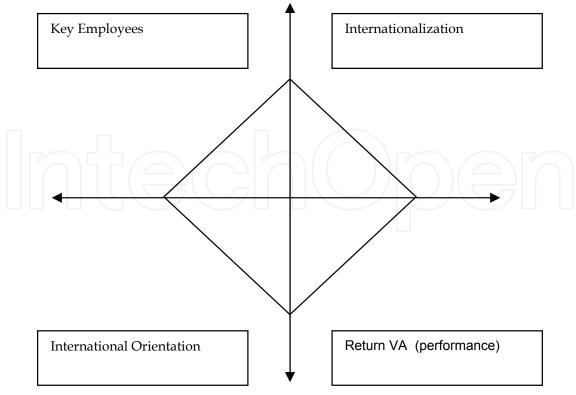


Fig. 2. Graphical Presentation

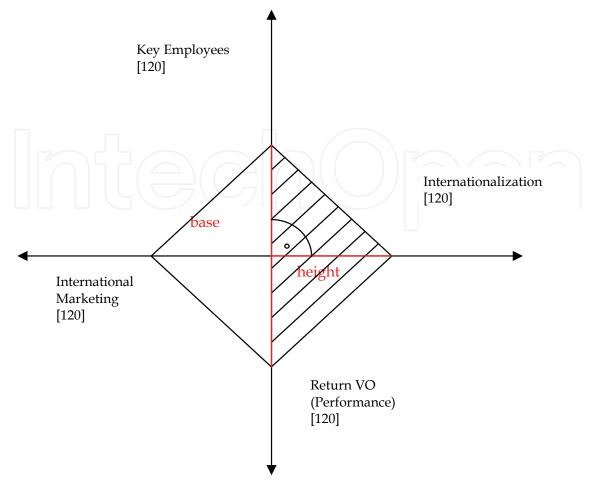


Fig. 3. Calculation of coverage ratio

Graphical image can help identify areas in which the company could increase its efforts or on the contrary, where are company's strengths. However, for accurate comparisons of individual companies among themselves the graphical image is not enough. This requires completing a graphical presentation by surface coverage ratio calculation of surveyed company in comparison to the area of perfect company coverage. To facilitate the calculation of the surface coverage ratio and avoid the lengthy calculations is the depicted rectangle divided into two triangles, whose areas can be easily calculated by using the formula for the calculation of any triangle:

$$S = 2 * \frac{z * v}{2} \tag{1}$$

In the formula "z" is the base of the triangle formed by the sum of the scores of key employees and performance in foreign trade operations, i.e. it is up to 240. "v" as the height of the triangle. These are points obtained in the internationalization block, where you can achieve the maximum rating of 120. In case of the second triangle, the base remains the same and changes only the height of the triangle, where we substitute points earned in the international orientation block, i.e. maximum is 120. We have to sum up the areas of two triangles to get area of depicted rectangle. The last stage of the calculation is actually a percentage of effective area coverage to maximum coverage obtained from the calculation of surface coverage of a perfect company.

The area coverage of a perfect company (in this case square area) is calculated as described above with the fact that we substitute the maximum value into the formula, and therefore it can be directly calculated:

$$2 * S = 2 * \frac{z * v}{2} = 2 * \frac{240 * 120}{2} = 2 * 14.400 = 28.800$$
 [unit²]

The proposed model has two variants of the scoring system. The first is based on the assumption that the company should receive points even in the case of least appropriate response. Because even just the fact that the firm does business in foreign market can be regarded as a form of success, and therefore the company gets at least the minimum amount of points for each reply - A scoring method. The second assessment method is based on the assumption that for least favourable response the company will not receive any points - B Scoring method. The particular assessment options will not differ as regards the results in case of successful companies, while the less successful companies may show significant differences in the assessment, since these companies will reflect more the zero points score in case of a least appropriate response.

2.1.3 Modification of evaluation model

The evaluation system is designed in a way that it is not difficult to modify it according to specific conditions of individual industries. In the proposed scoring system is indeed used the same weight for all groups of questions, but it might be modified according to the needs of businesses, where companies can assign greater weight to one of the defined group of questions.

2.2 Application of evaluation system

Rating system described above was applied to data obtained in the engineering industry. There were approached 200 companies in the data collection, 40 out of 200 completed all the necessary questions. On the basis of the completed questionnaires the questions were analysed in the particular blocks, and each company was assigned the appropriate number of points, and therefore obtained position date to construct a graphical representation of Czech SMEs success evaluation. For each company the coverage area was calculated, and then the coverage ratio was given, which is shown in Table 2 and Table 3. The coverage ratio is shown as a ratio of a surveyed company and a perfect company.

Total results are recorded in the tables below, showing that the company achieving the best results is the company with the number 33. On the other hand the least successful enterprise is demonstrated by the serial number 21. Interval of success evaluation ranged from 22.85% to 73.69% in the A scoring method and interval ranged from 8.95% to 66.27% in the B scoring method.

The above mentioned Tables 2 and 3 show clearly the coverage achieved by all 40 companies compared to the perfect company. The best 3 companies in each scoring method are highlighted in red.

Success evaluation of single blocks for each company is indicated in the Tables 4 and 5 below. There are the results of the top three companies highlighted in red. Also there was performed a graphical presentation of results achieved in the individual blocks both according to method A and according to the method B (Figure 4).

Figure 5 shows a company that has achieved the worst rating and Figure 6 shows a company with an average rating.

Number of company:	A Scoring method	B Scoring method
1.	35,71	23,50
2.	43,47	28,90
3.	45,54	33,83
4.	40,69	27,58
5.	31,87	18,69
6.	31,93	19,54
7.	35,47	21,71
8.	47,92	33,66
9.	35,99	23,91
10.	37,84	24,02
11.	46,51	32,80
12.	31,79	17,86
13.	35,87	23,63
14.	45,68	34,65
15.	59,74	51,18
16.	57,93	47,33
17.	30,54	17,77
18.	52,88	42,58
19.	26,65	13,09
20.	44,03	32,49
21.	22,85	8,95
22.	44,94	29,04
23.	65,40	57,07
24.	58,17	43,91
25.	36,00	21,43

Table 2. The coverage ratio in%

Number of company:	A Scoring method	B Scoring method
26.	54,11	40,82
27.	35,61	20,43
28.	28,22	14,87
29.	34,37	21,61
30.	27,61	14,52
31.	50,40	36,40
32.	45,28	31,72
33.	73,69	66,27
34.	41,22	27,06
35.	39,07	24,40
36.	49,98	36,33
37.	38,49	24,98
38.	31,76	17,87
39.	57,98	44,95
40.	34,19	20,61

Table 3. The coverage ratio in%

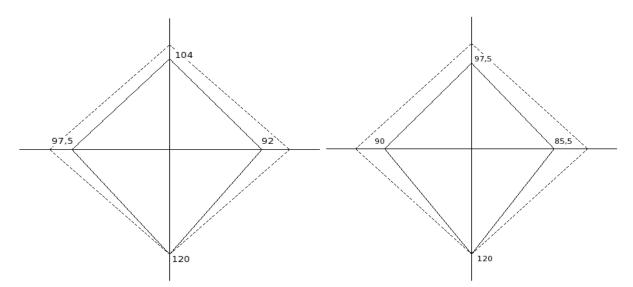


Fig. 4. Graphical presentation of the best companies with the serial number 33 (method A and method B)

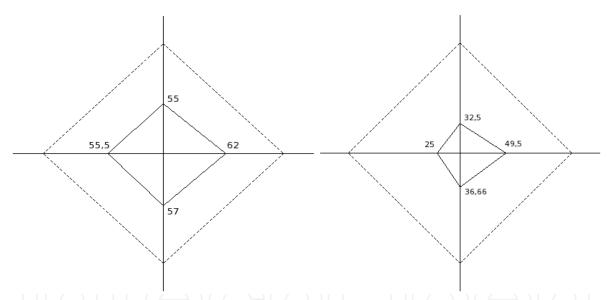


Fig. 5. The depicted rectangle of the worst company with the serial number 21

The above described model assesses the company as a complex and can be used to compare companies within one sector of industry. In addition, you can use the model to identify strengths and weaknesses of every single company with regard to their foreign trade activities. As a disadvantage may be considered that it is impossible to identify specific factors or groups of factors that influence the success of Czech SMEs on foreign markets, and especially cannot identify and define precisely the relationship between the studied factors and the resultant success rate of the company in foreign markets. This deficiency can be eliminated using the second model, which is focused on the scoring of using subjective and objective success indicators, as it is described below. This model allows us to define the dependent variable, which is necessary for further research to identify key success factors of SMEs in foreign markets.

Number of company:	A Scoring method				B Scoring method			
Number of company:	I	V	M	Z	I	V	M	Z
1.	72	<i>7</i> 5	76,5	63,5	61,5	56,64	62,5	52,5
2.	57	102	82,5	<i>77,</i> 5	43,5	86,64	70	60
3.	82	81	76,5	84,5	73,5	63,3	62,5	80
4.	57	87	82,5	81	43,5	69,96	70	70
5.	62	63	75	71	49,5	43,32	60	55
6.	67	72	75	57,5	55,5	59,97	60	37,5
7.	62	84	76,5	63,5	49,5	66,63	62,5	45
8.	77	105	67,5	86	67,5	90	50	75
9.	82	81	60	65	73,5	68,85	40	52,5
10.	57	93	69	80	43,5	76,62	52,5	67,5
11.	77	87	69	96,5	67,5	69,96	52,5	87,5
12.	72	63	70,5	65,5	61,5	43,32	55	45
13.	52	54	90	91,5	37,5	33,33	80	82,5
14.	57	108	90	71	43,5	106,62	80	55
15.	87	108	82,5	95	79,5	112,2	70	85
16.	97	111	75	83	91,5	109,95	60	70
17.	52	75	75	63,5	37,5	59,97	60	4 5
18.	87	96	75	92	79,5	93,3	60	82,5
19.	62	66	57	63	49,5	46,65	37,5	40
20.	62	87	82,5	88,5	49,5	76,62	70	80
21.	62	57	55,5	55	49,5	36,66	25	32,5
22.	97	87	75	63,5	85,5	69,96	60	4 5
23.	82	117	90	102	73,5	116,64	80	97,5
24.	102	105	90	69,5	97,5	90	80	52, 5
25.	62	90	82,5	53,5	49,5	73,29	70	30
26.	82	108	75	90,5	73,5	106,62	52,5	80
27.	87	84	69	47,5	79,5	66,63	52,5	22,5
28.	62	62	64,5	66,5	49,5	38,31	47,5	50
29.	62	57	75	87,5	51,5	36,66	60	75
30.	57	63	75	57,5	43,5	43,32	60	37,5

Table 4. Scoring for individual blocks

N. 1. 6	A Scoring method				B Scoring method			
Number of company:	I	V	M	Z	I	V	M	Z
31.	77	105	82,5	77	67,5	90	70	62,5
32.	72	93	90	68	61,5	76,62	80	52,5
33.	92	120	97,5	104	85,5	120	90	97,5
34.	72	81	75	80,5	61,5	63,3	60	65
35.	57	99	75	71,5	43,5	83,28	60	52,5
36.	62	105	97,5	75,5	49,5	90	90	60
37.	72	78	82,5	65,5	61,5	64,41	70	4 5
38.	72	84	63	51,5	61,5	66,63	45	30
39.	86	93	97,5	89	78	76,62	90	77,5
40.	72	75	61,5	72,5	61,5	56,64	42,5	57,5

Table 5. Scoring for individual blocks

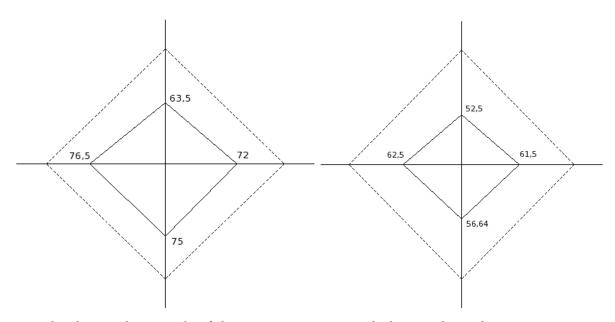


Fig. 6. The depicted rectangle of the worst company with the serial number 1

2.3 Assessment model of international enterprise performance

In the researches focused on the internationalization process there are very often used simple indicators for measuring the success of enterprises in foreign markets to identify key success factors. As a simple success indicator usable for subsequent identification of key success factors (namely for the definition of dependent variables for subsequent research) are most commonly used amount of foreign sales revenues, in addition profitability of foreign operations and international sales volume. These indicators can be classified as

indicators of objective and relatively easy to detect, but they do not provide enough information to evaluate the overall success of the company. Therefore it is necessary to add certain indicators.

For example there can be prefaced company whose amount of revenues from international activities does not achieve such large values as compared with total sales revenues. Foreign sales revenues and the volume of sales in foreign markets are not high either. In the case of using only objective business indicators, it can be evaluated as less successful or even unsuccessful. After including subjective indicators it may give different ratings. If management is satisfied with foreign activities and the targets were achieved, then we cannot consider this company as unsuccessful. So subjective indicators increase the explanatory power of assessments and higher explanatory power of the conclusion of subsequent research focuses on identifying key success factors.

2.3.1 Performance evaluation model of international company

The second model uses the multidimensional success indicators to evaluate success. As it was mentioned above the model consists of both objective indicators and subjective indicators. Among the objective indicators belong the intensity of SMEs international activities, the absolute profitability of SMEs international activities and the relative profitability of SMEs international activities. Among the subjective success indicators are classified the success of targets achievement and the satisfaction of management with international activities. A combination of objective and subjective indicators will give greater informative value than simply using the most commonly used indicators, for example sales or profits. The indicators should be adjusted to be used for further research.

Among objective indicators belong the following:

The SMEs intensity of international activities

The SMEs intensity of international activities is evaluated as the sum of all revenues generated from international activities. The total amount of sales would not provide relevant data, therefore there is used the share of revenues generated by international activities in relation to total company revenues. Because of the more accurate results, the revenues are taken as the average sales for the last three years. Intensity indicator is necessary to adjust for the purposes of statistical analysis as follows. SMEs with an intensity of less than 15% will be rated with "0", SMEs with intensity in the range of 15-40% are rated with "1", the companies whose intensity is 41-65%, are rated with "2", and businesses whose intensity exceeds 65 % will be rated with "3".

In the case of entry into foreign market through licensing then the scoring scale is as follows. If the intensity is less than 3% the number "0" is assigned, in the range of 3-6% it is the number "1", in the range of 7-10% it is the number "2" and if the intensity is higher than 11% then the rating is number "3".

The overall profitability of SMEs international activities

It can mean several things within the presented methodology considering a term the overall profitability. It can be the gain or loss which was achieved by SMEs in foreign market. Under the terms gain and loss is meant the difference between the total foreign sales revenues and cost associated with SMEs international activities. There may be two possible

outcomes: "business activities in foreign markets are profitable" or "activities in foreign markets are not profitable". For purposes of data analysis is needed to adjust the obtained data. If the result is positive and the company will be profitable, this result is rated by number "2" if not then the number is "0".

The relative profitability of international activities

Relative Profitability Indicator of the Czech SME international activities is designed as comparison of the profitability of the activities undertaken in the domestic market and the activities conducted in foreign markets. The data obtained should be adjusted and again transformed. If activities in the domestic market are more profitable than the activities in foreign markets, then the result is evaluated with a "0". If it is profitable on the same level, the result is "1" and finally if the profitability of domestic activities is lowers than the foreign ones, the number "2".

The Success of the Targets

The success of the targets indicator assesses, whether in the company the objectives related to operation in foreign markets were attained. Performance is measured by scales, namely: set targets were not achieved, set targets were partially achieved, most of the targets were achieved, and all the targets were achieved. For subsequent data analysis it was necessary to evaluate the obtained data. The procedure was as follows: "0" for missed targets, "1" for partial achievement of targets, "2" for achievement of most targets, "2" for achievement of all targets.

Management Satisfaction

The second subjective indicator focuses on the general management opinion of the success evaluation of their business internationalization. Respondents will be asked to categorize their internationalization activities in one of the following groups evaluating the success of internationalization activities: "unsuccessful", "yet unsuccessful, but they promise development" and "successful". These indicators of success were evaluated for subsequent analysis as follows: "0" to failed, "1" to yet unsuccessful, but they promise development and "2" for successful internationalization activity.

Overall performance

A complex evaluation indicator of international performance consists of all above discussed success indicators. A detailed description is shown in Table I. First, based on gathered information, there will be summarized individual success indicators. On its basis the individual companies will be grouped into cluster according to success. In case of entry into foreign markets through exports, joint ventures or direct investment, the existent company can receive a maximum of 12 points. Firms are sorted into three groups. Companies that reach more than 9 points are identified as very successful companies. Firms that reach a range of 5-8 points are identified as successful companies. Enterprises that reach less than 5 points are classified as unsuccessful with regard to their international activities.

Individual firms are sorted into three groups. Companies which have reached more than 7 points will be marked as very successful companies, the ones that reach a range of 3-6 points would be assessed as successful and companies that achieve less than 3 points will be classified as unsuccessful with regard to their international activities.

3. Conclusion

Table 6. System of Czech SMEs success evaluation

internationalization process. The process of internationalization is defined in the literature The paper deals with the success evaluation of small and medium-sized companies in the

	Export Loint Venture				
Joint Venture Direct Investment					
Partial achievement of targets or missed targets	Achievement of most targets	Achievement of all targets	7		
Unsuccessful	Promising development	Successful	Ma		
Unprofitable		Profitable	A		
Domestic activities are more profitable to international activities	Profitability is equal	International activities are more profitable to domestic activities	F		
Less than 15 %	<15-40 %) <40-65 %)	65 % and more			
Sum of success indicators < 5 unsuccessful enterprises	Sum of success indicators <5;8> successful enterprises	Sum of success indicators <9;12> very successful enterprises	Cur		
Sum	of success indicators		I		

in many ways; there is a countless variety of different approaches and models of firm's internationalization process. Like all processes in the firm also the internationalization process is accompanied by risks. For risk management it is important to know what the key success factors are in the international arena.

In this article there are presented two evaluation models that could be used by SMEs to determine several aspects. Not only how strong the companies are compared to competitors, but also at what level their key success factors in the process of internationalization are. The aim was to find a simple method to help small and medium enterprises assess their situation in the field of internationalization and to help them identify their strengths and weaknesses in this area. The first success evaluation model is based on graphical image of results. This graphical illustration of results allows us to simply compare the enterprises in terms of surveyed sectors surveyed sectors. To increase the information value of the model, the model is supplemented with numerical values, which simplify us the identification of strengths and weaknesses in relation to foreign trade activities. For data collection structured questionnaires are used and publicly available company's documents.

The second model is based on the use of multidimensional assessment indicators. On the basis of designed system, it is possible to assess surveyed SMEs and divide them into certain groups according to the achieved fruitfulness. The groups are: "unsuccessful", "successful" and "very successful". The evaluation success system of SMEs in the foreign market can enable comprehensive research to identify key factors influencing the successful internationalization of Czech SMEs in the foreign markets. Defined system is based on complex evaluation of Czech SME using multidimensional indicators, both objective and subjective. The proposed evaluation system monitors the proportion of export sales, the profitability of international activities, and both absolute and relative ones. Further there is investigated the management satisfaction with international company's activities and also whether the planned targets would be achieved. On the basis of this information the total company's performance is assessed. The enterprises are divided into several groups according to international activity success mentioned in the table No.1.

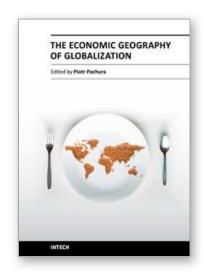
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5. References

- Andersen, O. (1993). On the Internationalization Process of Firms: A Critical Analysis. *Journal of International Business Studies JIBS*, Vol. 24, No. 2, pp. 209-231, ISSN: 0047-2506
- Boter, H. & Holmquist, C. (1996). Industry Characteristics and Internationalization Processes in Small Firms. *Journal of Business Venturing*, Vol. 11, pp. 471-487, ISSN: 0883-9026
- Cavusgil, S. T. (1980). On the Internationalization Process of Firms. *European Research*, Vol. 8, No. 6, pp. 273-281
- Coviello, N.C. (1999). Internationalisation and the Smaller Firm: A Review of Contemporary Empirical Research. *Management International Review*, Vol. 39, ISSN: 0938-8249

- Etemad, H.; Wright, R.W. & Dana, L.P. (2001). Symbiotic international business networks: Collaboration between small and large firms. *Thunderbird International Business Review*, Vol. 43, No. 4, pp. 481-499, ISSN: 1520-6874
- Fletcher, D. (2000). Learning to "think global and act local": Experiences from the small business sector. *Education + Training*, Vol. 42, pp. 211-219, ISSN: 0040-0912
- 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*, Vol. 8, Spring/Summer, pp. 23-32, ISSN: 1478-6990
- Johanson, J. & Weidersheim-Paul, F. (1975). The Internationalisation of the Firm--Four Swedish Cases., *Journal of Management Studies*, Vol. 12, pp. 305-322, ISSN: 1467-6486
- Knight. G.A. (2001). Entrepreneurship and strategy in the international SME. *Journal of International Management*, Vol. 7, No. 3, pp. 155-172, ISSN: 1075-4253
- Knight, G. A. & Cavusgil, S.T. (1996). The born global Firm: A Challenge to Traditional Internationalization Theory. *Advances in International Marketing*, Vol. 8, pp. 11-26, ISSN: 1474-7979
- Li, L.; Li, D. & Dalgic, T. (2004). Internationalization process of small and medium sized enterprises: towards a hybrid model of experimental leasing and planning. *Management International Review*, Vol. 1, No. 1, ISSN: 1551-6849
- McDougall, P.P. & Oviatt, B.M. (1997). International entrepreneurship literature in the 1990s and directions for future research. *D.L. Sexton & R.W. Smilor (Eds), Entrepreneurship* 2000, pp. 291-320
- Melin, L. (1992). Internationalisation as a Strategy Process. *Strategic Management Journal*, Vol. 13, pp. 99-118, ISSN: 1097-0266
- Miller, M. M. (1993). Executive Insights: The 10 Step Roadmap to Success in Foreign Markets. *Journal of International Marketing*, Vol. 1, No. 2, pp. 89-100, ISSN: 1547-7215
- Oviatt, B. M. & McDougall, P. P. (1997) Challenges for Internationalization Process Theory: The Case of International New Ventures. *Management International Review*, Vol. 37, No. 2, pp. 85-99, ISSN: 0938-8249
- Root, E. (1987). *Entry Strategies for International Markets*, Lexington Books, ISBN: 978-078-7945-71-8, Lexington, MA
- Yip, G. S.; Biscarri, G. & Monti, J. A. (2000). The Role of the Internationalization Process in the Performance of Newly Internationalizing Firms. *Journal of International Marketing*, Vol. 8, No. 3, pp. 10-35, ISSN: 1547-7215
- Welch, L. & Luostarinen, R. K. (1993). Inward-Outward Connections in Internationalization. *Journal of International Marketing*, Vol. 1, No. 1, pp. 44-46, ISSN: 1547-7215
- Welch, D. E. & Welch, L. S. (1995). The Internationalization Process and Networks: A Strategic Management Perspective. *Journal of International Management*, Vol.4, No.3, pp. 11-28, ISSN: 1075-4253



The Economic Geography of Globalization

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Very often the process of globalization is referred the word economy evolution. Often we measure and study globalization in the economic relevance. The economy is possibly the most recognized dimension of globalization. That is why we see many new phenomena and processes on economic macro levels and economic sectoral horizons as well as on specific "geography of globalizationâ€. The book The Economic Geography of Globalization consists of 13 chapters divided into two sections: Globalization and Macro Process and Globalization and Sectoral Process. The Authors of respective chapters represent the great diversity of disciplines and methodological approaches as well as a variety of academic culture. This book is a valuable contribution and it will certainly be appreciated by a global community of scholars.

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