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MEASURES OF COMPANY INTERNATIONALIZATION

Summary

Company (Enterprise) internationalization is a complex process. In addition, assessment of its proceedings and its degree is not an easy and unambiguous task. This article includes summary of indicators of internationalization process as well as grouping of indicators according to these particular components of the enterprise that can undergo internationalization process. This paper also contains criteria of assessment of the degree of internalization which shall make analysis of internationalization process in the companies easier for entrepreneurs.

1. Introduction

Company internationalization (regardless of adopted strategy of performing this process) requires obtaining capital, a competent manager, choosing appropriate product offer, then analyzing the target market (analysis of foreign markets), entering the foreign market (canvassing, sales, marketing) and developing operations (logistics, after-sales service, realization of payments, responsibility for sold products, intercultural communication in a team of employees) [Bielawska 2006, p. 20]. Each enterprise develops its own strategy of internationalization and in accordance with the adopted strategy it must provide a set of factors vital for the internationalization process and individually establish the level of these factors.

Internationalization usually does not cover all elements of an enterprise simultaneously and to the same extent. In order to measure the degree of internationalization it was necessary to construct detailed, analytical indicators and to determine ways of their interpretation in order to be able to measure equally all areas in which an enterprise may internationalize its activities.

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The aim of this article is to put together indicators assessing the scope, degree and intensity of internationalization in an enterprise and to develop their list and to determine the method of interpreting these indicators.

The first part of the article defines the term 'company internationalization' and the scope and degree of internationalization.

The second part presents the methodology of research on internationalization, while the third part regroups and lists indicators developed in the economic theories and measuring the degree of internationalization depending on the relation with a particular area of company activities.

The hereby article is the second part of the study which was published in post-conference materials in 2010^[1]. The first part dealt with measures used in assessing internationalization of economy, while this article presents microeconomic analysis of internationalization and measures used in assessing company internationalization.

2. Defining the scope and degree of internationalization in selected areas

Company internationalization is a process of gradual transformation of a domestic company into an international one, whose scope, degree and forms depend on its development strategy. The main forms of active internationalization of the company include: exports, international contacts and direct foreign investment [Gospodarka Polski po 15 latach transformacji 2005, p.289]

The scope of internationalization is a number of foreign markets served by this company and serving the company [Gospodarka Polski po 15 latach transformacji 2005, p.289], while degree of internationalization can be calculated using internationalization indicators.

The dictionary entry defines degree as a rung in classification. The degree of company internationalization assessed by means of indicators determines the position in the classification of internationalization level, which was developed as a model for assessment and analysis of results. Calculating the internationalization indicator and determining the degree of this internationalization by comparing it with the classification model allows us to conduct a comparative analysis with other enterprises. The term 'degree of internationalization' may be used interchangeably with the terms 'level of internationalization' and 'intensity of internationalization'[www.sjp.pwn.pl].

1 J. Jankowska, Przegląd mierników internacjonalizacji gospodarki, [in:] Organizacje komercyjne i niekomercyjne wobec wzmożonej konkurencji oraz wzrastających wymagań konsumentów, edited by A. Nalepka, A. Ujwary –Gil, WSB, Nowy Sącz 2010, p. 191.

The classification of internationalization may have a numerical form in absolute values or be in form of ranges. These ranges are usually expressed in percentage and determine the internationalization level of an enterprise.

It is assumed that economic activity, which has a wide scope of internationalization, that is involved in many countries, has a higher degree of internationalization than an economic entity conducting business only in a few countries [Pietrasieński 2005, p. 20].

Internationalization is often a lengthy process and the company involvement in operations in foreign markets may develop gradually – both in terms of the scale of operations and qualitatively differentiated forms of foreign activity. In further stages of internationalization, the company is becoming more and more tied with foreign consumer markets [Duliniec 2007, p. 15].

Globalization is a wider term than internationalization. The term ‘globalization’ is used for identification of a new phase of strategic orientation of companies operating in international markets. In this phase the foundation of building competitive edge is global integration and coordination of company activities [Yip 1997, Pierścioneck 1997 p. 317, Karcz 2004, p. 23].

Specialist literature sees internationalization as partial globalization or as an intermediary stage on the road to full globalization. Some authors identify internationalization exclusively with exports. Others believe that export, being clearly manifestation of internationalization, is the main indication of internationalization [Daszkiewicz 2004, p. 14]. In this article we assumed that export is the first step of internationalization, while globalization is the maximum level of internationalization a company can achieve.

3. Methodology of research on internationalization

Internationalization may be analyzed and interpreted dynamically (as a process), statically (operations of companies are described by means of indicators and profiles presenting the degree of internationalization) and in a behavioral way (as a result of behavior of international companies’ management) [Nowakowski 2000, p. 19, Karcz 2004, p. 28].

An organized system of company internationalization assessment covers both objective and subjective criteria.

Among objective criteria we have those related to the structure, for example the number of foreign units of a company, capital ownership structure according to its origin, organizational structure of the company, etc., as well as criteria of productivity, for example value of foreign revenues, value of fixed capital located abroad, etc., [Podstawy nauki..., 2001, p. 395].

Subjective criteria cover such variables as company management orientation, for example to polycentrism, regiocentrism, or geocentrism and others.

Polycentrism consists in adjusting company activities in particular countries to specific conditions there. Regiocentrism is orientation of company activities at the specificity of vast international regions, such as South America countries. Geocentrism means standardization of products or services on a global scale) [Sznajder 1999, p. 99]. Geocentric or global orientation means that the company offers standardized products or offers worldwide, only slightly adjusting them to fit local markets. Company globalization also covers use of cooperative supplies from entities located in many countries [Nasierowski 1994, pp. 11-13].

Internationalization based only on exporting products is 'shallow' as it does not require involvement of resources necessary for their production abroad. 'Deep' internationalization is based on the second dimension, which is transition of production infrastructure from domestic market to other countries. Its 'depth' results from the size of financial, material and human resources engaged in the process of internationalization, which are necessary to launch production outside home country [Pietrasieński 2005, p. 16].

Internationalization of an enterprise concerns on one hand consumer markets and on the other hand ties with production factors markets. These are two integral sides of the company internationalization phenomenon. We can state that internationalization of consumer markets precedes the process of production factors internationalization.

The company's ties with foreign markets of factors of production may cover material and non-material supplies [Pierścionek 2003, p. 455, www.ibngr.edu.pl]:

The highest degree of internationalization is achieved by companies in which internationalization of ties covers all types of factors of production. Moreover, intensity of internationalization of ties is high, therefore a large share of total consumption of raw materials, machinery, etc., belongs to those which come from foreign markets. What really matters for the level of internationalization of production factors is the number and type of countries – suppliers of production factors. The bigger the number of such countries, the greater their importance on the economic map of the world, the larger the share of foreign production factors (in total involvement), the higher the degree of internationalization of ties the company developed with supply markets [Pierścionek 2003, p. 456].

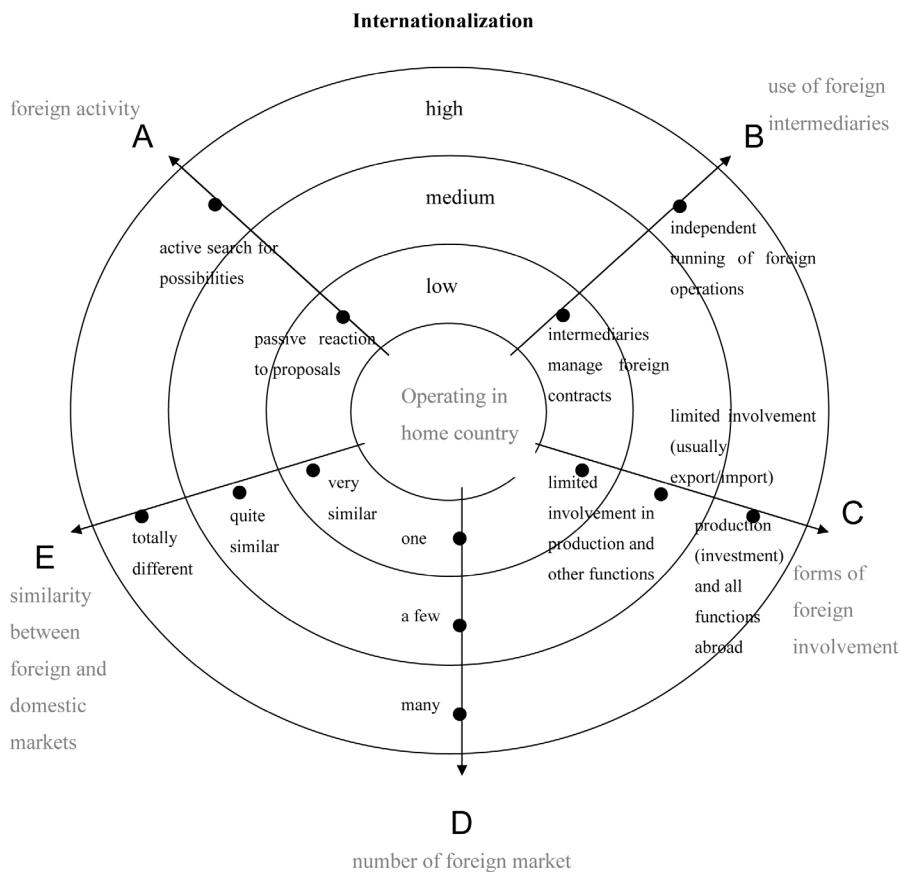
The degree of company internationalization may be assessed also on the basis of foreign capital saturation of the company. Using this method we can establish the company's ties with foreign capital markets and thus determine the level of foreign capital sources involvement in setting up foreign enterprises as well as determine foreign capital investments of the company of the foreign investment portfolio type [Pierścionek 2003, p. 455].

In case of economic units created with involvement of foreign capital, they can differ significantly in size of capital, and type of ties with shareholders [Międzynarodowe transakcje..., 2002, p. 356].

The realization of the strategy of company internationalization covers many areas of the company. In order to make synthetic assessment of the degree of internationalization, dimensions of the company internationalization have been determined (as shown in Figure 1). In this method we take into account various manifestations of internationalization in the company. These predominantly are [Marketing międzynarodowy 2007, p. 16]:

- company activity in performing operations in foreign markets (A axis in Figure 1): from clearly reactionary actions caused by appearing stimuli from abroad (as unsolicited inquiry or received offer of foreign cooperation) to strongly proactive search for possibilities (concerning exporting, launching production, etc.) in international market,
- the use of intermediaries in performing activities in foreign markets (B axis), namely the degree of independence in international involvement; usually initial stages of internationalization are accompanied by the use of intermediaries (trade agents, distributors) in performing activities concerning distribution, promotion, research, etc., sometimes even in domestic market, which may be attributed to lack of international experience, staff shortages, etc.; along with the progress of internationalization, the company is becoming more and more independent in managing its international operations, attracts appropriate personnel resources, creates branches abroad, etc.,
- scope of involvement (C axis): increasing internationalization means movement from less involving forms of presence in foreign markets (such as exports) to forms with much bigger involvement of company resources (as production and other activities connected with capital investments), and to forms in which a company offers in foreign markets not only its products but also licenses or management systems,
- number of markets in which a company is present (D axis): progress of internationalization results in performing operations in a growing number of countries,
- differentiation of foreign markets covered by company activities (E axis): Usually a company begins internationalization of its activities in neighboring and similar markets (for example with similar culture), then it gains international experience and enters more distant and different markets, which often means bigger difficulties in conducting its activities (for example marketing operations) and high risk of such activities.

Figure 1. Dimensions of company internationalization



Source: J.D. Daniels, L.H. Radebaugh, D.P. Sullivan, *International business environments and operations*, Pearson Education, Upper Saddle River 2004, p. 17.

In order to determine the level of company internationalization we should determine and mark on the axes of the diagram the levels of international involvement in each indicator of company internationalization. On the basis of the diagram we will be able to determine whether the company has low, medium or high level of internationalization, that is mark the field in which there will be the highest number of marked points.

The further from the center of the system (representing activities only in domestic market) the company is located, the higher its degree of internationalization [Marketing międzynarodowy, 2007, p. 17].

Apart from above-presented measures, the analysis of degree of internationalization may also cover other dimensions, such as the evolution stage of organizational structure or development of qualifications and scope of

experience possessed by company staff [Duliniec 2004, pp. 282-284, Marketing międzynarodowy..., 2007, p. 17], as well as the level of foreign ownership and use of foreign borrowed capital.

4. Measures of company internationalization and their interpretation

The economic theory has developed a number of indicators which can also be used to measure company internationalization. Table 1 groups indicators measuring internationalization according to areas of company activity (components) and listed evaluation indicators: internationalization of production and sales, internationalization of factors of production and the degree of connections with foreign capital markets

Table 1. Measures of company internationalization

Component	Feature of internationalization	Indicator of internationalization
Production and sales	Exports of products	Share of revenue from export sales in total (global) volume of revenues,
		Share of profit from exports in total (global) volume of profits,
		Share of foreign clients in total number of company clients.
	International contacts	Share of sales revenues from sales through foreign partners in total (global) volume of revenues,
		Share of profit from sales through foreign partners in total (global) volume of profits,
		Share of foreign clients attracted through foreign partners in total number of company clients
	Foreign direct investment	Number of production process links located in other countries in relation to total number of links in the company value chain,
		Value of assets (fixed capital and current assets) constituting foreign direct investment in the total value of company assets (fixed capital and current assets),
		Number of branches located abroad in relation to the total number of company branches,
		Share of revenue from sales of products manufactured in factories being foreign direct investment in total (global) volume of revenues,
		Share of profit earned on sales of products manufactured in factories being foreign direct investment in total (global) volume of profits

Component	Feature of internationalization	Indicator of internationalization
		Share of foreign direct investment value in total value of company investment,
Factors of production	Employment	Number of people employed abroad in relation to total number of employed people,
		Number of employees with foreign citizenship in relation to total number of employees.
	Deliveries of materials, fixed assets and services	Share of deliveries of raw materials, parts and components by foreign suppliers in total amount and value of deliveries,
		Share of machines and equipment bought from foreign companies in total value of machine and equipment purchases,
		Value of purchased services of foreign subcontractors in relation to total value of purchased services,
	Technological knowledge	Share of new products documentation, technologies and solutions in organization and management, that is licenses and know-how acquired abroad in total value of documentation, technologies, organizational solutions and know-how acquired by the company,
		Share of foreign consultation, expert opinions and trainings in total value of services purchased by the company concerning consultation, expert opinions and trainings,
		Share of used research and specialist literature created by foreign institutions in total amount of research and specialist literature used by the company.
	Capital markets	Companies with ownership share of foreign capital
Share of foreign start-up capital in total value of capital ((balance sheet total) .		
Foreign sources of financing operational activity		Share of foreign capital (loan, leasing, subsidy) used to finance operational activity in total sum of company capital (balance sheet total),
Foreign portfolio investment		Share of investment in foreign securities in total value of financial investment of the company.

Source: own elaboration on the basis of [Duliniec 2004, Gospodarka Polski... 2005, Międzynarodowe transakcje 2002, Pierścionek 2003, Rymarczyk 1996, Sudol 2006, Yip 1996].

All internationalization indicators listed in the table are used in assessment of company internationalization, but they evaluate only one element of company activities. Using all three components listed in table 1 we can create composite indicators which will provide us with the most complete assessment of company

internationalization. The trans-nationalization indicator is a weighted average of foreign shares in three dimensions: sales, assets and employment. In companies with the highest international cooperation this indicator exceeds 90% [Sudoł 2006, p. 134].

The second composite indicator is the Company Internationalization Indicator (CII) [Rymarczyk 1996, p. 19]. This indicator is arithmetic average of foreign sales, foreign employment and fixed assets in their total value in the company.

$$CII = \frac{\frac{FA_2}{FA} + \frac{T_2}{T} + \frac{E_2}{E}}{3}$$

where: FA2 – fixed assets abroad; FA – total fixed assets; T2 – turnover abroad; T – total turnover; E2 – employment abroad; E – total employment.

High percentage share of internationalization of all elements points at a totally internationalized company. Very high internationalization level of one element with low internationalization of other elements confirms high level of company internationalization.

The results of company internationalization indicator belong to the 0-1 range, where 0 means total lack of internationalization, and 1 – 100% of foreign employment in a company located abroad (100% of fixed assets are located abroad) and all company revenues come from foreign sources.

The most universal measure used to determine the scope of internationalization is the number of countries the company cooperates with in each area of its activity.

With indicators based on the level of product exports, it is assumed that the company is [Pietrasieński 2005, p. 21]:

- poorly dependent on foreign markets, if its foreign sales are lower than 13% of total company sales,
- averagely dependent, if its foreign sales are between 13% and 30% of total sales,
- strongly dependent if it sells over 30% of its production abroad.

In specialist literature it is assumed that companies which achieve at least 25% of their production from investments located in other countries can be called “international companies” [Chwistecka-Dudek 1993, pp. 74-75].

Companies which start internationalization of their operations from the very beginning of their history or shortly after their establishment, are called “born globals”. Such enterprises –in the period of up to three years after

registering their economic activity – achieve at least 75% of total revenues in foreign markets [Pietrasieński 2005, p. 27].

Companies which sell their products in the whole global market and which are present in strategic world markets, such as US, Chinese, Japanese and EU markets, achieve the highest possible level of internationalization, which is globalization [Yip 1996, p. 91].

Evaluating internationalization through involvement of foreign capital in a company, we should pay attention to the size and structure of this capital. The companies may show [Międzynarodowe transakcje..., 2002, p. 356]:

- full subordination to foreign capital (100% of ownership), uniform or dispersed ownership,
- dominant share of foreign capital: uniform or dispersed,
- majority share of foreign capital: uniform, dispersed, without limited rights, with limited rights (golden share),
- minority share of foreign capital, uniform, dispersed, with majority or minority of votes.

5. Conclusions

Due to universality of internationalization processes and their significance for company development, it has become vital to develop measures which would allow quantitatively determine the size of company internationalization and to enable us to compare this phenomenon in various companies. The ways of measuring internationalization presented in this article, including composite indicators, allow us to make such comparisons.

This paper is of methodological nature but all methods of assessing internationalization presented here could be used in empirical studies and in evaluation of the degree of company internationalization.

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