

IMPLICATIONS OF COOPETITION FOR INTERNATIONAL COMPETITIVENESS AND INTERNATIONALIZATION OF FIRMS: PERSPECTIVE OF SME AND LARGE COMPANIES

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—Abstract —

The concept of coopetition sheds new light on the way companies behave and the way in which value for customers and whole economies can be created. The emergence and growing popularity of simultaneous cooperation and competition between business actors encourages asking more in depth questions about the results of this kind of relationship for companies.

This paradoxical phenomenon is becoming more and more popular even among enterprises from transition economies such as Poland. After twenty years of building a market economy, Polish firms are becoming able to implement more sophisticated kinds of business behaviour.

The main aim of this paper is to attempt to recognize the implications of cooperation with market rivals for companies involved in this type of business behaviour. The author, by quoting literature written on the subject, presents the concept of coopetition and the results of coopetition for companies. This short overview is accompanied by empirical research, which took a form of direct interviews conducted in 57 companies from one region in Poland. The author highlights the methodology used to assess the involvement of a firm in coopetition. The results of the empirical study are discussed paying attention to the size of business agents – SME and large companies.

Key words: *coopetition, competitiveness, internationalization*

JEL Classification: F23, D21, D22

1. INTRODUCTION

International competitiveness and internationalization are popular research areas in the field of international business. This popularity is implied by the topicality of the question: how to increase the international competitiveness of enterprises and how to foster their internationalization, especially nowadays when the world economy faces the consequences of economic crises. In the course of the discussion on the possible methods of achieving these goals it is worth considering the concept of cooptation. Cooptation refers to simultaneous competition and cooperation among two or more business partners, particularly competitors, assuming that repetitive interaction takes place (Zerbini, Castalado 2007: 941-954).

The aim of the study is to identify the implications of cooptation for international competitiveness and internationalization of a firm. The author decided to conduct the research among companies from one region in Poland – Wielkopolska - because in this region the three biggest clusters were identified (regarding the rate of employment, specialization and competitive advantage) (www.clusterobservatory.eu) and cooptation is one of the main characteristics of business clusters (Porter, 2000: 15-34).

The first part of this paper provides the theoretical basis of research into the subject of cooptation and its possible results for companies. In the subsequent section the methodology of the research is outlined. This is followed by the presentation of the results of empirical research. The paper ends with conclusions and the formulation of a direction for future research.

2. THEORETICAL-CONCEPTUAL BASIS FOR RESEARCH INTO COOPTATION AND ITS RESULTS FOR COMPANIES

Cooptation, defined as a combination of cooperation and competition, is becoming a more and more popular area of research. More and more frequently one can hear opinions that this is a promising direction in scientific research and a direct result of changes in modern management practice (Ketchen, Snow, Hoover, 2004: 795). Definitions of this phenomenon were developed and presented by researchers from various countries, although the leading position goes to experts from Italy, i.e. Dagnino, Padula (2002). They define cooptation as “an incomplete interest and goal congruence”. On the basis of the number of interdependent firms and the level of the value chain they distinguished four types of cooptation:

simple dyadic (i.e. alliance – consortium in the field of R&D – only two partners), complex dyadic (i.e. alliances in automobile sectors – many partners, different fields of cooperation – R&D, manufacturing of components), simple network (coopetition among multiple firms at one level of the value chain), and complex network (i.e. Italian industrial districts). The question regarding the results that coopetition delivers to companies is still open.

Coopetition provides companies with access to unique and essential resources, including knowledge (Spence et al, 2001: 331-352), relationships and networks, while at the same time not depriving the company of the beneficial influence of competitive pressure (Hunt, 2007: 274-291). In this context, which is characteristic for a resource-based view of the firm, coopetition can increase and change the competitive potential of a firm. Its extent and quality are crucial for increasing the competitive advantage, which should be a feature of the competitive position of a firm. Thanks to coopetition a company gains the chance to focus on its key area of activity, learning from a business partner, and at the same time, due to their competition, can improve its competitive potential on the basis of its own experience or even failures. But at the same time joining competition and cooperation also makes it possible to alleviate the threats related to cooperation itself. Despite the positive effects that coopetition can bring, there is still a threat that the partners may want to seize unjustified profits. Another threat is the possibility of transforming a cooperating partner into an even stronger market competitor, and the need to avoid this may lead to a company neglecting its customers, which may unfavourably affect its profitability. A company can lose control over its key activities and resources, including information resources. This diversity of opinions justifies research that focuses on the implications of coopetition for international competitiveness and the internationalization of companies.

3. METHODOLOGY OF THE STUDY

3.1. Variables, relationships studied and the research question

The aim of this paper is an attempt to investigate the implications of coopetition for international competitiveness and internationalization of companies. For the sake of empirical research the author used Dagnino and Padula's approach to coopetition (2002: 15-17). To achieve this goal the author had to operationalize the relationships under study. Three variables were used to measure the intensity of coopetition: the number of competitors the company cooperated with, the differentiation of cooperative relations with competitors assessed by the number of organizational forms of coopetition, and the number of links in the value chain

which are performed in cooperation with market rivals. The international competitiveness of the company was measured by the market share and profitability of sales in both domestic and foreign markets. This means that the author focused only on one dimension of competitiveness - the competitive position of a firm. The competitive potential and competitive strategy were not taken into account. To evaluate the level of internationalization of the enterprise three indicators were used: the share of export sales in the total sales of the company, the number of foreign markets serviced by the company and number of forms of foreign expansion. Table 1 presents the operationalized variables of the research.

Table 1: Operationalization of research variables

Variable	Measures and their symbols
Intensity of cooperation	The number of competitors the firm cooperates with
	Differentiation of cooperative relations with market competitors – the number of organizational forms of cooperation
	Differentiation of cooperative relations with market competitors – the number of links in the value chain included in the cooperation with market competitors
International competitiveness of a firm	Relative share in domestic market/foreign market
	Profitability of sales in domestic/foreign market compared to key competitor
Internationalization of the company	The share of export sales in total sales of the company
	The number of foreign new markets
	Forms of foreign expansion

Source: author's own figures.

The research question was whether cooperation with market rivals caused some visible changes in the international competitiveness and internationalization of the company.

3.2. Method of data collection

Empirical research on the relationship between cooperation and the international competitiveness and internationalization was conducted in 2010. All the researched companies had to at least be involved in export as a foreign market expansion strategy. The company chosen had to cooperate with at least one rival and be located in the region of Wielkopolska, which is one of the 16 provinces in Poland. The author restricted the spatial scope of the research on purpose because the aim was to conduct the research among approximately 50 enterprises.

Cooperation with competitors is a very sensitive subject and hardly any company is eager to reveal this fact. The data from the web-site and the personal relationships of the author with some firms in the region helped to create the research sample. The method of sampling used, a non-random selection method, was snowball sampling. The interviews were conducted with managers of medium or high level or with the owners of the firms. The research tool was a questionnaire. To quantify the managers' opinions a five-degree ordinal scale was used, where 1 meant – “definitely not”; 2 – “rather not”; 3 – “difficult to say”; 4 – “rather yes”; 5 – “definitely yes”. The collected data were processed using the STATISTICA 9.0 programme. The method of sample selection clearly indicates that the results of the study cannot be generalized. The results can only indicate the possible interdependencies between cooperation and international competitiveness and internationalization of a company.

3.3. Characteristics of the sample

Direct interviews were conducted with 57 entities. The main industries the respondents belonged to were manufacturing and construction. Among these 57 enterprises the largest group were medium sized companies with between 100 and 249 employees (22% of the respondents). 15% were large companies (250 or more employees), 12% were small enterprises with less than 50 people, and 8% declared employment at a level of between 50 and 99 people. Among the researched companies the majority were private limited liability companies (over 42% of the companies) and joint-stock, both not publicly listed as well as publicly listed, companies (altogether 28% of respondents).

4. RESEARCH RESULTS

4.1. The nature and intensity of cooperation

According to the answers given by the respondents, the number of competitors their companies cooperated with is between 2 and 5, regardless of the size of the company. Cooperators having respondents that are entities located in Poland (level 4.25), that are of the same size as the respondents (level 3.93) and that participate in the same business clusters and business networks as the respondents (level 3.40). One can suppose that any domestic cooperation with market rivals is to support the foreign expansion plans of the firms. Participation in clusters by the researched companies is considered more important than being a member of economic self-governing institutions such as, for example, chambers of commerce.

Out of the possible forms of cooperation only four were included in the questionnaire. The respondents could choose among clusters, business networks, strategic alliances and short-term agreements. Managers could indicate more than one form, and if they could not find the form they were involved in they could add it. For the purpose of the research the following concepts were used: cluster – a group of companies; their customers, suppliers and business support institutions; focused on a particular industry and located in a particular area; business network – a network of simultaneously competing and cooperating enterprises without any spatial proximity; strategic alliance – a cooperation agreement between competitors regarding different areas of activity; manufacturing, R&D, marketing and sales, logistics, etc.; usually formalized in the form of a written agreement with a long-term horizon; short-term cooperation agreement – an agreement to perform one or more tasks together with short-term horizon, often developed ad hoc. First place in the ranking was found to be short-term agreements (73.68% of indications) and second place went to clusters (49.12%). On the basis of the research one can conclude that strategic alliances are not exploited by small companies employing less than 100 people. They are popular among big firms with more than 250 employees (7.02%). Clusters are attractive to small (less than 50 workers) (14.04%) and medium companies (100-249 employees) (19.30%). The strongest commitment to cooperation, assessed on the basis of the number of different forms of cooperation, is characteristic for companies of medium size.

Popular as areas of cooperation are production operations (level 3.75) and the supply of products and semi-products (level 3.61), with cooperation in the latter being particularly attractive for small companies with less than 50 employees (level 4.00). Cooperation in manufacturing certainly involves large companies (level 3.87) but small firms are noticeable too (level 3.83). The smallest firms also indicated cooperation within marketing and sales (level 3.83).

The analysis of the results obtained through the use of descriptive statistics provides some insight into the nature of cooperative relationships with market rivals. The explanation for being involved in such risky but, as one can suppose, attractive business relationships are the benefits it brings to the entities involved. What are the implications of cooperation for the researched entities? The author presents the opinions of the companies in the next section.

4.2. Results of coopetition for companies

4.2.1. Coopetition and changes in the international competitiveness and internationalization of companies

Cooperation with market rivals influences the international competitiveness of the entities analysed in the research. According to their answers cooperation with competitors increased their market share both in the domestic and the foreign market, although opinions about the domestic market were more optimistic (Table 2). The most positive and optimistic attitudes were expressed by the smallest enterprises, the only exception being changes to foreign market share. In this case the highest mark goes to the largest companies. This result seems to be in line with the obvious truth that bigger companies are often more engaged in internationalization. The respondents were asked to indicate possible changes in their internationalization caused by cooperation with market rivals. Looking at the answers we can state that thanks to coopetition the share of exports as part of total sales increased (level 3.77). The most optimistic about it are the smallest companies (level 3.92). The results obtained for the next two consequences of coopetition – changes in the portfolio of markets and implementation of more capital intensive and risky internationalization strategies are not clear.

Table 2: Implications of coopetition for the international competitiveness and internationalization of companies [n=57]

Specification	Average				
	Total	<50	50-99	100-249	250<
The company increased its market share in the domestic market	3.98	4.17	4.00	4.00	3.80
The company improved its sales profitability in the domestic market	3.85	4.00	3.75	4.00	3.67
The company increased its market share in one or more foreign markets	3.72	3.75	3.63	3.55	3.93
The company improved its sales profitability in one or more foreign markets	3.62	3.75	3.50	3.59	3.60
The share of exports as part of total sales increased	3.77	3.92	3.38	3.77	3.87
The company enlarged its market portfolio by entering foreign markets which had not been considered before	3.23	3.33	3.00	3.23	3.27
The company implemented more capital intensive and risky forms of foreign expansion other than exports	2.88	3.08	2.75	2.73	3.00

Source: own research.

4.2.2. Results of coepetition – comparison of companies groups

As the results of empirical research seem to be quite similar for each of the groups of companies (see Table 2), the author decided to find out if there are any statistically significant differences among companies which differ in size. The basic statistical technique used was a nonparametric analysis of Kruskal-Wallis variance. Within the test conducted the differences in distributions in relation to the independent variable “size of the company” were checked. The answers to the questions relating to the results of coepetition by companies were the feature which was studied (the dependent variable). A comparison between the values of the Kruskal-Wallis H results and the critical value in the statistical table of the chi-square distribution for $k-1=4-1=3$ degrees of freedom and $p=0.05$, which equals 7.815, showed that in this analysis an even distributions of results was obtained for all the variables. The calculated values of the H statistics were outside the critical range ($H < 7,815$). Therefore, the null hypothesis H_0 must be accepted. No statistically significant differences were observed in the opinions of companies analysed according to size. Such a result indicates that in respect of the companies researched, their size had no bearing on the consequences of their coepetition.

Table 3: Implications of coepetition. The significance level and critical values (similarities and differences in answers) [n=57]

Specification	Kruskal-Wallis test and resulting level of significance in differences and similarities
The company increased its market share in the domestic market	H=0.240, p=0.971
The company improved its sales profitability in the domestic market	H=0.451, p=0.929
The company increased its market share in one or more foreign markets	H=2.889, p=0.409
The company improved its sales profitability in one or more foreign markets	H=0.506, p=0.918
The share of exports as part of total sales increased	H=2.349, p=0.503
The company enlarged its market portfolio by entering foreign markets which had not been considered before	H=0.419, p=0.936
The company implemented more capital intensive and risky forms of foreign expansion other than exports	H=1.544, p=0.672

Source: own research.

5. CONCLUSIONS AND FUTURE RESEARCH

The results presented in this paper give a rather positive image of this type of business relationship. But the picture obtained is still not completely clear. If one tries to identify the firms most excited about cooperation with market rivals, it turns out to be the smallest ones. Companies employing less than 50 people expressed the most optimistic view of the results of cooperation for their international competitive position and internationalization. This result confirms the intuitive, but again discussed in the literature, issue of the usefulness of cooperation in general for smaller enterprises. Such entities often face a shortage of resources, and cooperation among others with rivals is a way to cope with this. Their positive perception of the implications of cooperation could be explained by the fact that it is easier to develop a direct and even personal relationship based on trust in the case of smaller entities. Smaller companies are characterized by a simpler organizational structure and show a preference for less formalized relationships within their organizational culture. One more observation that could be made is the attractiveness of clusters as a form of cooperation for small firms. These kinds of entities prefer cooperation with rivals located somewhere in the neighbourhood. This result confirms the often quoted statement about the attractiveness of clusters for small companies. On the basis of this research it is difficult to formulate any statement suggesting larger companies (more than 250 employees) are less prone to cooperate with market rivals. Their perception regarding the results of cooperation among this group of enterprises is mixed. Some results are evaluated lower than in other groups of firms and some are evaluated higher, which signals a more optimistic perception. An analysis of the data using descriptive statistics did not reveal any very noticeable and significant differences in the opinions of the firms. To check the results, the author conducted a nonparametric analysis of Kruskal-Wallis variance. The analysis did not reveal any significant differences in the answers by the respondents. The size of the company does not alter its perception of the results of cooperation.

The perception of the results could be different among companies characterized by different levels in the intensity of cooperation. The question is whether a higher intensity of cooperation would give rise to a proportionate increase in the perception of the results of cooperation for companies. Is it possible that firms cooperating with a specific number of competitors, participating in more than one form of cooperation and being involved in more value chain activities with their rivals, achieve better results? This is the subject for the next analysis in the future.

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