5. SMEs, international new ventures and international entrepreneurship (interactive paper)

Contrasting export intensity of enterprises during global economic crisis – findings from a transition country

ABSTRACT

The paper focuses on issues related to Polish company's export intensity and the global economic crisis. Poland is a transforming economy, actively engaged in international trade. At the same time, it is the only EU member country that managed to uphold a positive GDP growth rate during years 2009-2011. In relative terms, Poland also recorded very good export dynamics during the period mentioned. We investigate this export performance taking a microeconomic perspective, as the capacity of the firms to react actively to the challenges brought by the crisis, deeply influences the ability of the whole economy to recover from it, and export remains predominant internationalization mode for many Polish companies. While doing so, we try to indicate what characterized Polish companies actively involved in export in the year 2010. The paper contributes to the literature by examining the relationships among firms' competitive potential, marketing strategy, environmental factors and export intensity of Polish manufacturing companies. Given the conditions of the global economic crisis and the importance of exports in revitalizing an economy, we seek to provide some evidence for policy makers.

INTRODUCTION

Recognition and adaptation to drastic and sudden environmental changes may be particularly difficult for some enterprises (Carroll, 1984; Tripsas, Gavetti, 2000). While certain companies are able to retain or even increase their competitiveness even during economic crises (Abernathy, Clark, 1985; Tushman, Anderson, 1986), others remain unsuccessful in their efforts. The presented paper focuses on issues related to Polish company's export intensity and the global economic crisis. The selection of the country under investigation was purposeful. Poland is a transforming economy, actively engaged in international trade (the

share of exports in the GDP of Poland in the year 2007 amounted to 38.82% (The World Bank DataBank, 2015)), but at the same time it is the only EU member country that managed to uphold a positive GDP growth rate during years 2009-2011, when the effect of the global economic crisis was visible. Undoubtedly, the expansion of a nation's exports has positive effects on the growth of the economy as a whole, as well as on individual firms (Cavusgil, Nevin, 1981). Both GDP and exports growth rates' values for the EU and the Eurozone during years 2008-2013, and those recorded for World during years 2008-2009 and 2011-2013 were much worse than values recorded by Poland (see Table 1). We investigate this unprecedented export performance taking a microeconomic perspective, as the capacity of the firms to react actively to the challenges brought by the crisis, deeply influences the ability of the whole economy to recover from it, and export remains predominant internationalization mode for many Polish companies. While doing so we try to answer the following research questions: What characterized Polish companies actively involved in export in the year 2010? We believe that the identification of export intensity determinants should simultaneously consider the external environment of the firm and its strategic characteristics (Aaby, Slater, 1989). Therefore, the paper contributes to the literature by examining the relationships among firms' competitive potential, marketing strategy, environmental factors and export intensity of Polish manufacturing companies during the global economic crisis period. Given the conditions of the global economic crisis and the importance of exports in revitalizing an economy, we seek to provide some evidence for policy makers with regard to promoting export. The paper can also contribute an answer to calls for a cross-sectional export research in more economic 'intermediate-level' countries (Filatotchev et al., 2008).

Table 1: here.

The empirical findings of the paper are based on primary data gathered during direct interviews conducted in February and March 2015 and secondary, financial information concerning the analyzed companies drawn from electronic database. The following parts of the paper present literature findings as the background for hypotheses formulation, methodology of the study and the results of conducted analyses.

LITERATURE OVERVIEW AND HYPOTHESES DEVELOPMENT

The presented study uses the resource-based theory and environmental determinism as a background for hypotheses development. The resource-based paradigm suggests that company-level operations and activities determine firm's export propensity. Taking this approach, one can talk about the influence that the firm's size, experience, competencies and marketing strategies can have on the company's export performance (Aaby, Slater, 1989; Cavusgil, Zou, 1994; Styles, Ambler, 1994; Zou, Stan, 1998). On the other hand, firm's performance is not entirely driven only by its actions and resources. Variables referring to industry and market conditions are expected to mediate the influence that the various firm characteristics, strategies and competencies have on the company's export performance (Reid, 1981; Cavusgil, Zou, 1994; Yeoh, Jeong, 1995). Altogether it is expected that the company export intensity will depend on internal aspects of company's operations and external, environmental factors.

External factors

There is a strong agreement in the literature that managerial perceptions of the firm's environment are important to the understanding of international activities of companies (Milliken, 1990). According to the environmental determinism theory, the decisions made within a company are adapted to opportunities, threats, constraints and other characteristics of the environment (Papadakis et al., 1998). Although this theory has been rarely referred to export decisions (Zou, Stan, 1998), we refer it to this issue by the combination of demand and competition settings.

Demand conditions that a particular company enjoys directly limit its short-term sales capacity and performance measures that it can achieve. At the same time, a company engaged in export activities face certain demand conditions in its national and foreign markets. The direction of the relationship between a company's export intensity and foreign market demand seems easy to indicate. The higher demand the company enjoys in foreign markets, the more attractive they are, and the more a company sells to those countries. On the other hand, a few empirical studies, concerning as well developed as developing countries, indicate that a higher

domestic demand in the national market may prevent local companies from engaging in export activities (Ball et al., 1966; Artus, 1973; Zilberfarb, 1980; Faini, 1994; Sharma, 2003), as enterprises may decide to meet the demand of local customers first. This opinion is based on the premise that operating in foreign markets is associated with a higher level of risk, when compared to the domestic market. By analogy, a decrease in national demand, or at least a slower speed of demand growth (as in Poland case it may be more appropriate), may push companies to sell on foreign markets.

H1: Companies facing slower growth of demand in the national market are characterized by higher export intensity.

H2: Companies facing higher growth of demand in foreign markets are characterized by higher export intensity.

Intensity of competition can be also perceived as a company's internationalization determinant. Intense competitive pressures in a home country are accounted as one of the push factors for company's involvement into internationalization process (Tatoglu et al., 2003). At the same time, rivalry in foreign markets can also be important while making internationalization decision. However, results of a study presented by Eren−Erdogmus et al. (2010) show that although a competition level in a host country remains an important factor in internationalization decision, the perception of an attractive market in terms of competition level may be different, depending on the aims and situation of a company. It seems that in the case of the companies that are better equipped to face foreign competitors, an intense rivalry does not constitute a problem. Otherwise, it may decrease the attractiveness of foreign markets.

H3: The higher competition a company faces in the domestic market, the higher its export intensity.

H4: The lower competition a company faces in foreign markets, the higher its export intensity.

Internal factors

It is said that the company's ability to meet foreign customer requirements effectively determines its export performance (Katsikeas, 1994). This ability can be referred to as firm's competitive potential and export marketing strategy.

According to Porter's activity-based view (1985), a company can be perceived as a collection of interrelated activities that create economic value. These activities can be conducted in a better way and/or at lower costs than rivals do. On the other hand, representatives of resource-based view of a firm (Wernerfelt, 1984, 1995; Barney, 1991) claim that companies diversity results from unevenly distributed resources, which are tied semi-permanently to the firm. Since resources are responsible for value creation, they are perceived as source of competitive advantage. The more valuable, rare, imperfectly imitable and well organized the resources are, the more sustainable source of competitive advantage they constitute (Wernerfelt, 1984; Barney, 1991). In the paper we assume that while analyzing company's competitiveness it is important to take into consideration not only possessed and used resources, but also activities required to utilize those resources. The more value the company is able to create with its competitive potential, the more attractive offer it should create and the easier it should be for the company to successfully operate on foreign markets. Studies of Ito, Pucik (1993), Naidu, Prasad (1994) and Holzmüller, Stöttinger (1996) prove existence of positive relationship between firm competencies and export performance. Therefore the fifth hypothesis is:

H5: Companies with better competitive potential are characterized with higher export intensity.

Export marketing strategy encompasses company export product, pricing, distribution and promotion (Katsikeas et al., 2000). According to Cavusgil and Zou (1994, p. 4) export marketing strategy constitutes "the means by which a firm responds to the interplay of internal and external factors to meet the objectives of the export venture". In the presented study selected aspects of company's offer (its uniqueness, pricing and advertising expenditure) have been confronted with the firm's export intensity.

It is understandable that companies with a unique offer will be interested in selling it to a large number of foreign customers, as this allows companies to achieve benefits of economies

of scales. Findings of Cavusgil, Nevin (1981), McGuinness, Little (1981) and Burton, Schlegelmilch (1987) suggest that, among others, unique product attributes allow companies to achieve better export performance. However, the empirical studies mentioned above were based on the samples of companies operating in well-developed countries. At the same time, uniqueness of the offer may create difficulties in terms of the adjustment of the offer to the idiosyncrasies of foreign markets. Studies of Christensen et al. (1987), based on Brazilian firms, indicate that standard product is more successful; suggesting that the stage of the country development may be a mediator between uniqueness of the product and company's export performance. Poland is a transition economy, while its export concentrates on more developed EU member states (Dzikowska et al., 2014). Therefore, we assume that the relationship between products uniqueness and export intensity will be negative.

H6: Companies with more unique offer are characterized with lower export intensity.

Research results suggest that low-price strategies were a common approach among many exporting firms aiming at attracting a large number of foreign customers (Cooper, Kleinschmidt, 1985; Katsikeas, 1994), especially those exporting to neighboring countries (Cooper, Kleinschmidt, 1985) and originating from less-industrialized countries (Katiskeas, Piercy, 1990). In terms of companies located in Poland we can talk about existence of both mentioned features, as Polish export concentrate within central and western European neighboring countries (Dzikowska et al., 2014), while the country remains a developing economy. As a result, we assume that the relationship between the price attractiveness of the offer and export intensity of the analyzed companies is positive.

H7: Companies with more competitive prices are characterized with higher export intensity.

Empirical results concerning relations between company's export and advertising spending are ambiguous. Findings of Burton, Schlegelmilch (1987) and Fraser, Hite (1990) suggest existence of a strong positive influence of advertising expenditure on export performance regardless of export destination. However, the results of Cunningham, Spiegel (1971) and Moser, Topritzhofer (1979) suggest that the degree of advertising is not correlated with export performance. Therefore, in this regard we decided to create two alternative hypotheses:

H8a: Companies with higher advertising spending are characterized with higher export intensity.

H8b: Advertising spending of a company is not related to export intensity.

METHODOLOGY AND RESULTS

Table 2 presents operationalization of the variables. Besides the dependent and independent variables, some control variables have been included into the model to tease out other factors potentially affecting dependent variable. These variables refer to company's industry, size, assets value, profit margin, number of foreign markets where it was present, attention paid to expansion of export operations in the analyzed year, withdrawal from foreign markets and production overcapacity recorded in the previous year and involvement in FDI in both years[1].

Table 2: here.

The research sample consisted of Polish enterprises (understood as enterprises registered and located in Poland) from 7 selected manufacturing industries (manufacturing of: food products (10), wearing apparel (14), leather and related products (15), paper and paper products (17), basic metals (24), fabricated metal products, except machinery and equipment (25), others (32). The industries mentioned were selected for the analysis since they were identified[3] as respectively the worst and the best performing within the manufacturing section during the year 2009, when the influence of the global economic crisis was most apparent. In the first step selected financial information were drawn from AMADEUS database for all the companies operating in the selected industries for which selected financial data concerning years 2009-2013 were available. This allowed to create a database of 2833 companies. Primary data for the study were gathered during direct interviews conducted with high-rank managers of the analyzed companies in February and March 2015. Trained interviewers contacted 202 companies, of which 154 agreed to take part in the study, and 122 gave answers to all the questions relevant for this study. This constitute a highly satisfactorily response rate of 60% and represented 4% of the identified population.

While majority of the data used in the models is based on information collected from respondents; however, variables encompassing profit margin and assets value were based on

secondary information drawn from electronic database. This allowed to cope with the potential problem of a common-method bias that could artificially inflate the observed relationships between variables (Campbell, Fiske, 1959).

Table 3: here.

Table 3 presents a correlation matrix for the analyzed variables. To detect potential problems of multicollinearity, the correlation coefficients among the independent variables of the model were checked. The data seemed not to involve multicollinearity problems as none of the correlations were above a level of 0.5 (the usual level indicating possible multicollinearity (Hair et al., 1995). Additionally, for all independent variables tolerance and variance inflation factor (VIF) levels were estimated (see Table 3). All the tolerance values were above 0.20 and the VIF values were less than 2, therefore far below the level of 5 or 10 indicating potential multicollinearity problems (Chatterjee et al., 2000; O'Brien, 2007).

The ordinary least squares regression model (OLS) was used to test the hypotheses. The developed models are presented in Table 4. For both formulated models the F values were statistically significant with R-square above 0.30, some independent variables were statistically significant, the mean of the error terms was equal to 0 and the models had a mean-zero residual random component. Moreover, the Durbin-Watson test values were very close to 2 (between 2.11 and 2.14) for both models, which confirms that there were no significant problems with residual autocorrelation, while the tolerance and the VIF values for independent variables did not indicate multicollinearity problems (see Tables 3 and 4). Therefore it was concluded that the models fitted well to the empirical data.

Table 4: here.

The results of the conducted regression model indicate that there are grounds to reject the 3rd, 4th, 5th and 8tha hypotheses. In case of the 5th hypothesis, the relationship has not been statistically significant. This means that at least in the analyzed sample better competitive potential, understood as company's resources and capabilities[4], was not accompanied with higher export intensity. As no reasons were found to reject the 6th and 7th hypotheses, concerning aspects of marketing strategy, it suggests that in the analyzed sample export

intensity of the company was more dependent on the strategy of configuring resources and capabilities (marketing strategy), than on the resources and capabilities themselves.

The reasons for rejection of the 3rd and 4th hypotheses are not based on the statistically insignificant relations. It is a result of the opposite directions of the primarily assumed relations. In the case of the analyzed companies higher intensity of competition in the national market during the global economic crisis did not act as a push factor for a higher export intensity, while a higher intensity of competition in foreign markets did not prevent from higher export intensity of the analyzed companies. A potential explanation for such results is exceptional economic condition caused by the global economic crisis. However, we also believe that a high penetration of Polish market by foreign companies can explain why a higher level of competition in foreign markets does not decrease their attractiveness for Polish exporters. Since Polish companies had been facing foreign competitions also on their national market, they were not discouraged by their presence in other countries. Additionally, the analyzed companies on average were relatively big, had valuable assets and a better competitive potential than their closest rivals (see Table 3); which suggests that they were relatively well prepared to successfully face foreign competitors. On the other hand, it can be added that in the case of competitive conditions in the analyzed sample push factors were not the primary determinant of internationalization process. In line with findings of Williams (1991, 1992) firm's operations and ability to respond to international opportunities for growth were rather more important factors.

Results concerning uniqueness of the offer and its price stay in line with finding of other studies based on companies from emerging countries. It is said that such companies enjoy the advantages of low labor and production costs (Aulakh et al., 2000), and as a result they compete on price rather than differentiation in their international operations, and enjoy lower returns (Gao et al., 2003). This is supported by the negative relationship between export intensity and uniqueness of the company's offer and positive relationship between export intensity and price competitiveness. Additionally, there was a lack of statistically significant relationship between export intensity and profit margin (a control variable) of the analyzed

companies, indicating that higher export intensity was not accompanied by higher profitability.

There were no reasons found to reject hypotheses concerning relationships between demand conditions in the domestic and foreign markets and export intensity. In fact the results indicate that in the analyzed sample we can talk about, mentioned in the literature, simultaneous presence of push and pull factors stimulating foreign expansion (Lopez, Fan, 2009, pp. 283-285), where a week growth within a domestic market pushed companies to expand abroad, while attractive foreign conditions pulled them in that direction.

Finally, two of the used control variables turned out to have statistically significant relationship with export intensity of the analyzed companies. One of them indicate that the companies actively involved in export activities were operating in a bigger number of markets, which might suggest that the share of exports regarding particular, single, foreign market were relatively low. The other one highlights that the companies with higher export intensity were characterized with higher level of production overcapacity in the year 2009. A question arises whether this overcapacity was a result of the global economic crisis in general or rather a relatively high decrease in the values of foreign trade. Answering this question requires further analysis.

The presented paper constitutes a work-in-progress. It requires further analysis of the data allowing to answer some of the additional questions raised in the paper. At the same time, the number of companies under investigation should be enlarged, allowing introduction of a bigger number of variables and making the study more statistically representative. Additionally, the results concerning the year 2010 could be confronted with the results referring to the post crisis period (i.e. year 2013). Such a solution could allow to highlight the differences concerning export intensity determinants during and after an economic downturn. Nevertheless, we believe that the presented paper is a useful starting point for further research. The purpose of the paper was to highlight some of the determinants of export intensity in the context of a country that turned out to be very successful in coping with the

recent global economic crisis[5], so that both firms and policy makers can recognize and seize opportunities to promote growth in their business units and countries respectively.

BIBLIOGRAPHY

Aaby, N., Slater, S., 1989, Management influences on export performance: a review of the empirical literature 1978-88, *International Marketing Review*, 6: 7-25.

Abernathy, W., Clark, K., 1985, Innovation: Mapping the winds of creative destruction, *Research Policy*, 14: 3-22.

Artus, J.R., 1973, The Short-Run Effects on Domestic Demand Pressure on Export Delivery Delays for Machinery, *Journal of International Economics*, 3: 21-36.

Aulakh, P.S., Kotabe, M., Teegen, H., 2000, Export strategies and performance of firms from emerging economies: evidence from Brazil, Chile, and Mexico, *Academy of Management Journal*, 43: 342-361.

Ball, R.J., Eaton, J.R., Steuer, M.D., 1966, The Relationship Between United Kingdom Export Performance in Manufactures and the Internal Pressure of Demand, *The Economic Journal*, 76: 501-518.

Barney, J.B., 1991, Firm resources and sustained competitive advantage, *Journal of Management*, 17: 99-120.

Burton, F.N., Schlegelmilch, B.B., 1987, Profile analyses of non exporters versus exporters grouped by export involvement, *Management International Review*, 27: 38-49.

Campbell, D.T., Fiske, D., 1959, Convergent and Discriminant Validation by the Multitrait-multimethod Matrix, *Psychological Bulletin*, 56: 81-105.

Carroll, G.R., 1984, Organizational ecology, *Annual Review of Sociology*, 10: 71-93.

Cavusgil, S.T., Nevin, J.R., 1981, Internal determinants of export marketing behavior: An empirical investigation, *Journal of Marketing Research*, 18: 114-119.

Cavusgil, S.T., Zou, S., 1994, Marketing strategy-performance relationship: an investigation of the empirical link in export market ventures, *Journal of Marketing*, 58: 1-21.

Chatterjee, S., Hadi, A.S., Price B., 2000, *Regression analysis by example*, John Wiley and Sons, New York.

Christensen, C., da Rocha, A., Gertner, R.K., 1987, An empirical investigation of the factors influencing exporting success of Brazilian firms, *Journal of International Business Studies*, 18: 61-78.

Cooper, R.G., Kleinschmidt, E.J., 1985, The impact of export strategy on export sales performance, *Journal of International Business Studies*, 16: 37-55.

Cunningham, M.T., Spiegel, R.I., 1971, A study in successful exporting, *European Journal of Marketing*, 5: 2-11.

Eren−Erdogmus I., Cobanoglu, E., Yalcin, M., Ghauri P.N., 2010, Internationalization of emerging market firms: the case of Turkish retailers, *International Marketing Review*, 27: 316-337.

Faini, R., 1994, Export supply, capacity and relative prices, *Journal of Development Economics*, 45: 81-100.

Filatotchev, I., Stephan, J., Jindra, B., 2008, Ownership structure, strategic controls and exporting of foreign invested firms in transition economies, *Journal of International Business Studies*, 39: 1133-1148.

Fraser, C., Hite, R., 1990, Impact of international marketing strategies on performance in diverse global markets, *Journal of Business Research*, 20: 249-262.

Gao, P., Wortzel, J.R., Wu, Y., 2003, Can Chinese brands make it abroad?, *McKinsey Quarterly*, 4: 54-65.

Ito, K., Pucik, V., 1993, R&D spending, domestic competition and export performance of Japanese manufacturing firms, *Strategic Management Journal*, 14: 61-75.

Katsikeas, C., Leonidou, C.L., Morgan, N., 2000, Firm level export performance assessment: review, evaluation, and development, *Journal of the Academy of Marketing Science*, 28: 493-511.

Katsikeas, C.S., 1994, Export competitive advantages: the relevance of firm characteristics, *International Marketing Review*, 11: 33-56.

Katsikeas, C.S., Piercy, N.F., 1990, The relationship between Greek export manufacturers and UK importers: the dimension of exercised power, *Journal of Marketing Management*, 6: 239-256.

McGuiness, N.W., Little, B., 1981, The influence of product characteristics on the export performance of new industrial products, *Journal of Marketing*, 45: 110-122.

Milliken, F.J., 1990, Perceiving and interpreting environmental change: An examination of college administrators interpretation of changing demographics, *Academy of Management Journal*, 33: 42-63.

Naidu, G.M., Prasad, V.K., 1994, Predictions of export strategy and performance of small and medium sized firms, *Journal of Business Research*, 31:107-115.

O'Brien, R.M., 2007, A Caution Regarding Rules of Thumb for Variance Inflation Factors, *Quality & Quantity,* 41: 673.

Papadakis, V.M., Lioukas, S., Chambers, D., 1998, Strategic decision making: The role of management and context, *Strategic Management Journal*, 9: 115-132.

Porter, M.E., 1985, *Competitive Advantage*, The Free Press, New York.

Reid, S.D., 1981, The decision maker and export expansion, *Journal of International Business Studies*, 12: 101-112.

Sharma, K., 2003, Factors determining India's export performance, *Journal of Asian Economics*, 14: 435-446.

Styles, C., Ambler, T., 1994, Successful export practice: the UK experience, *International Marketing Review*, 11: 23-47.

Tatoglu, E., Demirbag, M., Kaplan, G., 2003, Motives for retailer internationalization to Central and Eastern Europe, *Emerging Markets Finance and Trade*, 39: 40-57

Tripsas, M., Gavetti, G., 2000, Capabilities, cognition, and inertia: Evidence from digital imaging, *Strategic Management Journal*, 21: 1147-1161.

Tushman, M., Anderson, P., 1986, Technological discontinuities and organizational environments, *Administrative Science Quarterly*, 31: 439-465.

Wernerfelt, B., 1984, A resource-based view of the firm, *Strategic Management Journal*, 5: 171-180.

Wernerfelt, B., 1995, The Resource-Based View of the Firm: Ten Years After, *Strategic Management Journal*, 16: 171-174.

Williams, D., 1991, Differential firm advantages and retailer internationalization, *International Journal of Retail & Distribution Management*, 19: 3-12.

Williams, D., 1992, Retailer internationalization: an empirical inquiry, *European Journal of Marketing*, 26: 8-12.

Yeoh, P. Jeong, I., 1995, Contingency relationships between entrepreneurship and export channel structure and environment: a proposed model of export performance, *European Journal of Marketing*, 29: 95-115.

Zilberfarb, B.Z., 1980, Domestic Demand Pressure, Relative Prices and the Exports Supply Equation-More Empirical Evidence, *Economica*, 47: 443-450.

Zou, S., Stan, S., 1998, The determinants of export performance: a review of the empirical literature between 1987 and 1997, *International Marketing Review*, 15: 333-356.

Dzikowska, M., Gorynia, M., Trąpczyński, P., 2014, Towards a Strategic Shift? On the Evolution of Poland's Position in the World Economy in 2003-2012, 1st AIB CEE Chapter Conference, Competitiveness of the CEE Region in the Global Economy, Budapest, 2014.

Holzmüller, H.H., Stöttinger, B., 1996, Structural modeling of export success factors - cross-validation and further development of an export performance model, *Journal of International Marketing*, 4: 29-55.

Lopez, C., Fan, Y., 2009, Internationalization of the Spanish fashion brand Zara, *Journal of Fashion Marketing and Management*, 13: 279-296.

Moser, R., Topritzhofer, E., 1979, Exploratorische LOGIT- und PROBIT Analysen zur empirischen Identifikation von Determinanten der Exporttüchtigkeit von Unternehmen, *Zeitschrift für Betriebswirtschaft*, 49: 873-90.

ENDNOTES

[1] We have also used other control dummies, but they did not create any changes with regard to statistical significance of variables.

[2] We have also included traditional industry dummy, but this did not create any changes with regard to statistical significance of variables.

[3] We have used linear ordering method to indicate the industries. It has required a use of a synthetic indicator.

[4] While testing the models resources and capabilities had been also included separately, but this did not create any changes with regard to statistical significance of variables.

[5] We are aware that the impact of the global economic downturn on Polish companies was partly neutralized by PLN (Polish zloty) depreciation in relation to the main international currencies.

Table 1: Exports of goods and services and GDP during years 2006-2013 (annual % growth)

		2006	2007	2008	2009	2010	2011	2012	2013
Poland	Exports of goods and services	15.63	10.19	7.01	-6.28	12.86	7.87	4.33	4.97
	GDP growth	6.19	7.20	3.92	2.63	3.70	4.76	1.76	1.67
European Union	Exports of goods and services	9.47	6.20	1.48	-11.92	10.44	6.60	2.07	1.87
	GDP growth	3.42	3.07	0.48	-4.41	2.13	1.76	-0.40	0.06
Euro area	Exports of goods and services	8.59	7.29	0.97	-12.74	11.09	6.58	2.42	2.03
	GDP growth	3.26	3.06	0.49	-4.55	2.06	1.66	-0.70	-0.46
World	Exports of goods and services	9.86	7.90	3.29	-10.49	13.25	7.00	3.00	3.38
	GDP growth	4.11	3.93	1.48	-2.08	4.08	2.79	2.27	2.29

Calculated based on constant USD 2005.
Source: The World Bank DataBank (accessed: April 2015).

Table 2: Variables

Variables	Description
Export intensity (t)	Share of export in the total sales of a company in the year 2010.
Demand increase in national market (t)	Respondents were asked to evaluate (on a 7-point Likert type scale) strength of demand increase on the Polish market in the year 2010 (1 = were not present at all, 7 = were very strong).
Demand increase in foreign markets (t)	Respondents were asked to evaluate (on a 7-point Likert type scale) strength of demand increase on foreign markets in the year 2010 (1 = were not present at all, 7 = were very strong).
Competition increase in national market (t)	Respondents were asked to evaluate (on a 7-point Likert type scale) strength of competition increase on the Polish market in the year 2010 (1 = were not present at all, 7 = were very strong).
Competition increase in foreign markets (t)	Respondents were asked to evaluate (on a 7-point Likert type scale) strength of competition increase on foreign markets in the year 2010 (1 = were not present at all, 7 = were very strong).
Competitive potential (t)	Respondents were asked to evaluate (on a 7-point Likert type scale) 13 items related to company's competitive potential when comparing to the closest rivals in the year 2010 (1 = the company was much worse than competitors and 7 = the company was much better than competitors). 13 indicators encompassed: tangible, intangible, human and financial resources, and capabilities in terms of logistics, operations, marketing and sales, procurement, service, technology development, HR management, firm infrastructure and quality control. Cronbach Alpha = 0.85.
Product uniqueness (t)	Respondents were asked to evaluate (on a 7-point Likert type scale) uniqueness of their offer when comparing to the closest rivals in the year 2010 (1 = the company was much worse than competitors and 7 = the company was much better than competitors).
Product price (t)	Respondents were asked to evaluate (on a 7-point Likert type scale) price of their offer when comparing to the closest rivals in the year 2010 (1 = the company was much worse than competitors and 7 = the company was much better than competitors).
Advertising spending (t)	Respondents were asked to evaluate (on a 7-point Likert type scale) level of their advertising spending when comparing to the closest rivals in the year 2010 (1 = the company was much worse than competitors and 7 = the company was much better than competitors).
Size	Scale from 1 to 4 indicating size of the company according to EU nomenclature based on the number of employees (1 = <1; 9>, 2 = <10; 49>, 3 = <50; 249>, 4 = 250 and more).
Assets value (t)	Value of company's assets in the year 2010.
Industry	Dummy variable indicating if the company operated in the industry identified as the most/least negatively influenced by the crisis (1=the least negatively influenced, 0 = the most negatively influenced).[2]
FDI (t-1 + t)	Dummy variable indicating if the company made any FDI in the year 2009 or 2010 (1 = investments were made, 0 = investments were not made).
Importance of foreign expansion (t)	Respondents were asked to evaluate (on a 7-point Likert type scale) the company's actions aimed at entering new foreign markets in the year 2010 (1 = actions were not taken at all, 7 = actions were very significant).
Number of foreign markets (t)	Number of foreign markets where the company was selling its offer in the year 2010.
Foreign markets withdrawal (t-1)	Respondents were asked to evaluate on a 7-point Likert type scale the company's actions aimed at exiting foreign markets in the year 2009 (1 = actions were not taken at all, 7 = actions were very significant).
Production overcapacity (t-1)	Respondents were asked to evaluate (on a 7-point Likert type scale) strength of production overcapacity of the company in the year 2009 (1 = were not present at all, 7 = were very strong).
Profit margin (t)	The ratio of profit/loss before tax to sales of the company in the year 2010.

Dependent variables, *independent variables*, control variables.

Table 3: Correlation matrix for the analyzed variables (N=122)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1 Size	1.00																	
2 Assets value	0.30	1.00																
3 Industry	-0.14	0.01	1.00															
4 FDI (t-1 + t)	0.18	0.33	-0.06	1.00														
5 Importance of foreign expansion (t)	0.03	0.02	-0.01	0.04	1.00													
6 Number of foreign markets (t)	0.15	0.37	0.03	0.20	0.33	1.00												
7 Foreign markets withdrawal (t-1)	-0.18	-0.05	0.05	-0.13	0.19	0.00	1.00											
8 Production overcapacity (t-1)	-0.13	-0.22	-0.14	-0.14	0.10	-0.02	0.17	1.00										
9 Profit margin (t)	0.14	0.02	0.11	-0.04	-0.04	0.08	-0.03	-0.01	1.00									
10 Demand increase in national market (t)	0.14	0.03	-0.13	0.21	0.00	0.07	-0.15	-0.17	0.14	1.00								
11 Demand increase in foreign markets (t)	0.02	-0.02	-0.12	0.24	0.44	0.23	0.16	0.09	-0.01	0.21	1.00							
12 Competition increase in national market (t)	0.12	-0.01	0.01	0.16	-0.04	0.07	0.02	0.06	0.24	0.26	-0.09	1.00						
13 Competition increase in foreign markets (t)	0.04	0.06	0.04	0.25	0.28	0.24	0.14	0.00	0.01	-0.10	0.29	0.33	1.00					
14 Competitive potential (t)	-0.09	0.02	0.09	0.08	0.29	0.19	-0.01	0.18	0.01	0.02	0.32	0.09	0.17	1.00				
15 Product uniqueness (t)	0.15	0.01	0.13	0.07	0.42	0.20	0.06	-0.08	-0.05	0.14	0.29	0.12	0.08	0.25	1.00			
16 Product price (t)	0.11	0.06	-0.13	0.30	0.11	0.13	-0.15	0.08	0.03	0.17	0.15	0.13	0.17	0.03	0.26	1.00		
17 Advertising spending (t)	0.07	0.01	-0.07	0.22	-0.17	0.11	-0.20	0.04	0.01	0.12	0.10	0.05	0.06	0.25	0.12	0.11	1.00	
18 Export intensity (t)	-0.03	0.03	-0.07	0.03	0.26	0.38	-0.03	0.26	0.04	-0.20	0.37	-0.24	0.29	0.22	-0.02	0.22	0.16	1.00
Av.	3.51	196944.12	0.85	0.17	3.60	9.61	0.19	3.24	0.04	4.43	4.49	4.82	4.63	5.07	5.02	5.07	4.35	36.29
S.D.	0.66	377040.04	0.36	0.38	2.24	8.83	0.66	2.21	0.12	1.83	1.96	1.63	2.04	0.74	1.14	1.07	1.52	22.48
Tolerance	0.78	0.67	0.83	0.66	0.54	0.70	0.79	0.75	0.86	0.68	0.55	0.61	0.60	0.70	0.60	0.76	0.74	
VIF	1.29	1.50	1.21	1.52	1.87	1.43	1.26	1.33	1.16	1.47	1.83	1.65	1.68	1.42	1.66	1.32	1.35	

Correlation coefficient with a value of 0.15 or above is statistically significant at $p<0.1$ and coefficient with a value of 0.18 or above is statistically significant at $p<0.05$.
Source: own empirical study.

Table 4: Regression models

	Control model 1	Model 1
Size (t)	-5.22	-0.40
Assets value (t)	-0.00	-0.00
Industry	-5.59	-0.73
FDI (t-1 + t)	1.70	-6.74
Importance of foreign expansion (t)	0.95	0.30
Number of foreign markets (t)	1.15***	0.79***
Foreign markets withdrawal (t-1)	-4.20	-3.53
Production overcapacity (t-1)	2.20***	1.77**
Profit margin (t)	4.15	17.96
Demand increase on national market (t)		-2.15**
Demand increase on foreign markets (t)		2.93***
Competition increase in national market (t)		-4.01***
Competition increase in foreign markets (t)		2.34***
Competitive potential (t)		1.45
Product uniqueness (t)		-3.32*
Product price (t)		4.30**
Advertising spending (t)		1.65
Intercept	37.47***	10.70
N	122	122
F-value	6.47***	6.40***
R-square	0.30	0.51
Adjusted R-square	0.25	0.43
S.E.	20.09	16.95
Durbin Watson	2.14	2.11

***, ** and * indicate significance levels lower than 0.01, 0.05 and 0.06 respectively.
Source: own empirical study.