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From confrontation to cooperation - institutional support in building cooperation of Polish enterprises

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From confrontation to cooperation - institutional support in building cooperation of Polish enterprises

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Abstract: The article presents results of critical theoretical and empirical analysis of cooperation between Polish enterprises based on two models: made by T. Ozawa and M.E. Porter, and followed by market research concerning opportunities to support cooperation of Polish enterprises. Polish companies seem to opt for confrontation, as the main market strategy, basing on the development of one company while worsening the position of rivals at the same time. The aim of this paper is to show possibilities in supporting Polish companies to build their capabilities, as well as identifying barriers, in transition from confrontation to cooperation.

The article is divided into four parts. In the first part, there are defined the stages of development of economy and enterprises in Europe, concentrating the attention on Poland, with reference to T. Ozawa model. The analysis covers the indicators included in European Innovation Scoreboard, Exploratory Approach to Innovation Scoreboard, Global Summary Innovation Index, and STI indicators, with regard to cooperation aspects. In the second part the authors analyse the essence and forms of cooperation between companies. The third part of the paper concentrates on the market research of the support means available for Polish enterprises. In conclusion, there was given a brief summary of the main findings about opportunities and barriers of institutional approach towards cooperation between Polish enterprises.

In the paper two types of research methods were used: methods of data collection and methods of organizing and processing information. There can be

enumerated especially methods of systems, cause and logical analysis of institutional support.

Introduction

Companies which want to be effectively competitive on the market do not have to use only their own resources, knowledge, competences and procedures. They may also cooperate with external partners to obtain solutions from outside, through the purchase of patents and licenses, and above all, through cooperation with other companies. This idea of openness is expressed by the concept of open innovation (Chesbrough, 2003). Innovative enterprises are based largely on the cooperation with other entities. Cooperation in the field of innovation allows companies to access mainly to knowledge and technology. While cooperating there is also a great potential for synergies, as partners learn from each other. Cooperation in the field of innovation can take place along the supply chain, include customers and suppliers in the joint work on the development of new products, processes, and may relate to the scientific cooperation with entrepreneurs. Collaboration between companies may include entities within one country, as well as partners from different countries.

Due to the great importance of the entrepreneurship's development in the national economy, it is important to recognize the activity of public institutions in supporting initiatives of cooperation between the enterprises in Poland, apart from financial support. The stage of development of Polish economy slowly impacts on appearing new challenges. At the beginning of transformation the most important need for creation a strong private sector in economy was an access to the capital. This phase is not finished, however, while gathering EU financing or use government's guarantee schemes, the access of entrepreneurs to external sources of financing increased very much, especially micro, small and medium entities. Policy to support SMEs is carried out in many areas and institutional levels. On the other hand, Polish legislation and activities are focused on financial demand and building innovation initiatives, which substantially provides better access to finance of this group of actors.

This article concentrates on the opportunities existing within the activity of institutions supporting entrepreneurs and its entire assessment. This research arose on the basis of the literature with theoretical approach to cooperation issues and an analysis of the assumptions and principles of operation of presented institutional programs and activities.

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Methodology of the research.

In the paper there were used two types of research methods: firstly, regarding data collection and secondly, methods of organizing and processing information. There can be enumerated especially methods of systems, cause and logical analysis. Moreover, methods of description and critique of the literature (analogy, deduction, induction and reduction) were used while studying Polish and foreign papers, providing the view on existing scoreboards of innovation in functioning the enterprises in the economy. The analysis covered then the indicators included in European Innovation Scoreboard, Exploratory Approach to Innovation Scoreboard, Global Summary Innovation Index, and STI indicators (Science, Technology and Innovation), with regard to cooperation aspects. The important aspect was analysis and synthesis of the methods describing the input of cooperation to innovation performance. Within the process of analysis and selection there were found some only examples of the attitudes to strengthen linkages between enterprises. Within the selection of such indicators there were identified these factors which relate to cooperation with the assessment of their performance in Polish market.

By reviewing economic theories of T. Ozawa and M.E. Porter exploring enterprises' behaviour on the market in the context of forms of cooperation and by empiric research of opportunities and ways of support available for the companies by institutions, the authors make the study in two perspectives. First, they try to deduct if the enterprises are prepared to cooperation and have accurate opportunities given by institutional support. Then, they describe the approaches towards institutional support at the local, regional and central levels considering cooperation development of the companies regarding already existing help in the area of external financial sources or creating networks.

Economic development level of countries based on T. Ozawa's model

T. Ozawa's model is a theoretical study explaining Japan's foreign direct investments (FDI) in the early stage. The objective of this model is to explain FDI within a framework of comparative advantage, specifically by considering the factor endowments of the home and host countries (Ozawa, 1979, pp. 72-92). T. Ozawa observed development of Japanese foreign investment, comparing to an American model, and stated that it requires a different type of explanation. He noticed a shortage of land and also natural

resources (especially energy and mineral resources) as irremovable scarcities which would limit the prospects for industrial expansion. That is why Japanese firms were compelled by necessity, caused by the resource constraints at home, to extend their subsidiaries overseas threw direct investment (Phongpaichit, 1990, pp.15-16).

Ozawa underlined that FDI does not only transfer capital, but a larger package of resources, including technological and managerial assets which are specific resources of the country of origin. In such a perspective, foreign investment, derived from technologically advanced country, can enhance the efficiency of the less developed country for the production of the labor intensive goods. The objective of the investor is to increase the return on its assets since labor is more abundant and thus cheaper in less advanced country. The Japanese model shows that this type of investment creates trade by increasing the comparative advantage of less developed country in the production of labor intensive goods. It is essential that in this area "Japanese style" has been opposed to the foreign investment in the USA, a highly developed country, which substituted foreign production to trade. It is worth to add that the structure of Japanese investment did not last and had evolved to become more comparable to that of the other industrialized countries. Japanese economy does not match this model anymore, as Japan largely invests in services and in technologically sophisticated sectors.

T. Ozawa summarizes his model as an "industry-cycle approach". Firms relocate more or less mature industries abroad in order to keep exploiting some competitive advantage, while overcoming the increase of domestic costs (Sachwald, 2013, pp. 47-49). It is evident in T. Ozawa's analysis, that the framework can be applied to the cases of newly industrialized countries (Miyamoto et al., 2011, p. 117).

Moreover, T. Ozawa formulated his economic development model as consisting of four stages (Puchalska, 2010, p. 351):

- stage 1 the development is driven by factors of production; it is characterized by activity based on natural resources or labor-intensive industries;
- stage 2 investments-driven development, it is characterized by the production intermediates and capital goods and infrastructure construction;
- stage 3 innovation-driven development; arises when the country is rich in human capital and is manifested in research activity and development;

 stage 4 – wealth-driven development; it is characterized by the development of modern industries, flexible, diverse production, using various innovations.

Ozawa's point of view can be used to discover differences in the level of development of European countries in conjunction with the ability to cooperation. Cooperation is perceived as one of the drivers of innovation. The interesting results are presented by the Innovation Union Scoreboard. which gives the picture of a very little level of cooperation between small and medium enterprises in Poland. The measurement framework used in the Innovation Union Scoreboard analyses the performance of the EU innovation system and distinguishes three main types of indicators (the Enablers, Firm activities and Outputs) and eight innovation dimensions, capturing in total twenty five different indicators¹. They all together create Summary Innovation Index (SII). The Member States are classified into four performance groups based on their average innovation performance. Denmark, Finland, Germany and Sweden are "Innovation leaders" with their innovation performance high above the EU average. Austria, Belgium, Cyprus, Estonia, France, Ireland, Luxembourg, Netherlands, Slovenia and the United Kingdom are "Innovation followers" with performance above or close to the EU average. "Moderate innovators" are classified below the EU average innovation performance at relative performance rates between 50% and 90% of the EU average. This group includes: Croatia, Czech Republic, Greece, Hungary, Italy, Lithuania, Malta, Poland, Portugal, Slovakia and Spain. "Modest innovators" are: Bulgaria, Latvia and Romania with innovation performance well below the EU average (IUS, 2014, p. 4).

The most innovative countries perform very well in all dimensions: from research and innovation inputs, through business innovation accomplishments up to innovation and economic effects (IUS, 2014, p. 6). Their performance reflects a balanced national research and innovation system. Considerable differences between the Member States exist particularly in knowledge excellence, internationalisation, and business innovation cooperation. Particularly large differences are seen in the international competitiveness of the science base and business innovation cooperation as measured by aspect called Linkages & entrepreneurship.

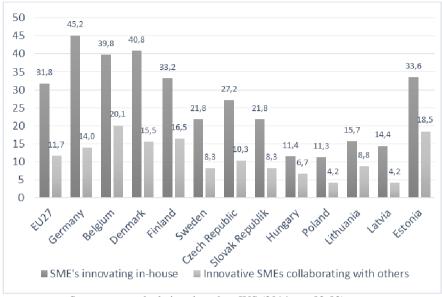
¹ The Enablers capture the main drivers of innovation performance external to the firm: Human resources, Open, excellent and attractive research systems as well as Finance and support. Firm activities describe the innovation strengths at the level of the companies, grouped in dimensions like: Firm investments, Linkages & entrepreneurship and Intellectual assets. Outputs cover the effects of innovation activities in dimensions of Innovators and Economic effects. See more in: IUS (2014).

In the dimension Linkages & entrepreneurship the Innovation leaders (Belgium, Denmark, Sweden and the UK) are performing the best. SMEs in these countries have more deeply rooted innovation capabilities as they combine in-house innovation activities with joint innovation activities with other companies or public sector organisations. The research systems in these countries are also geared towards meeting the demand from companies as highlighted by high co-publication activities.

All the Modest and Moderate innovators achieve scores below the EU average and Poland is performing relatively weak even compared to the other Moderate innovators. Within the Moderate innovators the best performing country (Greece) performs almost four times higher than the least performing country (Poland) (IUS, 2014, p. 16). The innovation performance in Poland has only slightly improved between 2006 and 2013 and due to more prompt growth of the EU, the relative Polish performance has been declining from 54% in 2007 to about 50% in 2013. As the result Poland dropped from being a Moderate innovator up until 2011 to be a Modest innovator in 2012. Poland is performing below the EU average for most indicators. Relative weaknesses are: the number of PCT patent applications in social challenges, license and patent revenues from abroad. Relative strengths of Poland lie in the category of non-R&D innovation expenditures and youth with upper secondary level of education. High growth is observed for R&D expenditures in the business sector. Strong declines in growth are observed in measures like: number of innovative SME's collaborating with others, number of new doctorate graduates, SMEs innovating in-house and sales of new innovations (IUS, 2014, pp. 16, 65).

As the most important aspect for strengthening the cooperation of companies it may be pointed out the indicator called the "Innovative SMEs collaborating with others". This indicator measures the degree of involvement of SMEs in innovation cooperation. It is considered as the share of SMEs as the sum of SMEs with innovation cooperation activities, i.e. firms having any cooperation agreements on innovation operations with other enterprises or institutions within the three years of the survey time. Complex innovations, particularly in ICT, often depend on the capability to draw on varied bases of information and knowledge, or to collaborate on the growth of an invention. This indicator processes the transfer of knowledge between public research institutions and companies or between firms. For Poland these indicators show the lowest level comparing to the CEE countries presented at Figure 1. It is limited to SMEs since almost all large corporations are involved in innovation co-operation.

Figure 1. Linkages and entrepreneurship performance according to the Innovation Union Scoreboard 2014



Source: own calculations based on IUS (2014, pp. 82-83).

SME's innovating in-house indicator shows the sum of SMEs with in-house innovation activities. Innovative firms are defined here as firms which have launched new or significantly improved products or processes either in-house or in combination with other firms. This indicator measures the degree to which SMEs have innovated in-house. The indicator is limited to SMEs because almost all large firms innovate and because countries with an industrial structure weighted towards larger firms tend to do better.

A similar methodology was used to determine the Global Summary Innovation Index (GSII), which in contrast to the IUS index is based only on the 12 indicators. Most of them are the same as in the IUS, but there are also some differences. GSII index consists of five complex components: the potential, knowledge creation, innovation and entrepreneurship (diffusion), application, intellectual ownership (Arundel & Hollanders, 2006, pp. 5-7).

However, both indicators have some disadvantages, which in 2006 drew attention of National Endowment for Science, Technology and the Arts (NESTA). According to it, these measures include mainly scientific and technological innovation, what in today's economy is not sufficient. This method of measurement of innovation was specific for the period of the

linear model of innovation. When innovation develops in accordance with the interactive model, a method for measuring the level of innovation potential of the economy should involve the aspect of rising the large part of innovation out of the R&D departments, including services (Zadura-Lichota (Ed.), 2013, pp. 46-47). NESTA experts also questioned the economic sense of expenditure on research and development, arguing that there is no evidence that these expenditures have contributed to the growth of prosperity. They criticize the meter, which is the number of patents as not always effectively restrained by imitators, and a large part of them is not of market interest (NESTA, 2015, pp. 20-21).

EIS indicators (European Innovation Scoreboard) were developed and supplemented in the form of the EXIS indicators (Exploratory Approach to Innovation Scoreboards) in 2005. EIS indicators were supplemented then by (Arundel & Hollanders, 2015):

- a greater concentration on regional level than at the national level;
- a more diverse range of activities relevant for innovation, such as indicators of demand or innovation management, as well as marketing and organizational innovations;
- the partial indicators in the thematic areas.

Within EXIS indicators there evaluated factors connected with knowledge transfer from universities to entrepreneurs or financial aspects, like venture capital or institutional financial support, however, there is also subindicator concerning the percentage of firms cooperating internationally in the field of innovation calculated from separate data for processing and service sectors.

STI indicators (Science, Technology and Innovation) are determined on the basis of data collected by Eurostat, to support activities within the innovation policy at local communities. In 2010 The European Commission considered these indicators as corresponding closely to innovation policy and being a key element of the initiative under Innovation Union and the European Research Area (ERA) and monitoring tool The Europe 2020 strategy (European Commission, 2015b). Depending on the degree of complexity they can be divided into four generations (Zadura-Lichota (Ed.), 2013, pp. 52-53). First-generation of innovation policy is involving the linear development of innovation, from R&D to the market. Indicators of this kind sign the volume of input and correspond to the concept of first-generation linear model of the innovation system targeting investments in R&D sector, expenditure on education, capital expenditures, staff research, college graduates, technological intensity etc.

Second-generation innovation policy was declaring the existence of multiple effects occurring in the innovation process, where there are created innovation systems in the form of patents, publications, quality improvement, number of new products or processes. Second-generation indicators were accompanied by calculating indirect expenses and the results in R&D activities.

Third-generation policy, which is currently carried out, put innovation in the centre of attention in areas such as research, education, competition, regional policy etc. Third-generation indicators focus on enriching the set of indices analysing research-based innovation. The primary task is to rank national benchmarking and capacity for innovation. The biggest difficulty is to follow the international comparisons and the inclusion the services sector, where the product is the process, not comparable in benchmarking.

From the point of view of the aim of this article the most crucial is the fourth-generation of innovation policy, which is actually in the early stages of formation. In relation to the third-generation it is based on the knowledge transfer, cooperation and networking of firms (Milbergs & Vonortas, 2015, pp. 2-5). These indicators include knowledge and networking. It is assumed that the current approach to measure innovation based on measuring the company's machinery and equipment or the number of doctorates or patents is insufficient in the information economy. Knowledge can be dignified using composite measures and complex performance indicators. Moreover, no organization is able to be innovative in isolation. Production of technologically advanced innovation requires the cooperation of many companies. Proper assessment of network economy based on knowledge is possible, provided the knowledge of the rules governing networks. The helpful in this task may be composite indicators of networking, which should include such elements as: strategic partnership, licensing of intellectual property, cooperation in the field of R&D, knowledge sharing or cooperation within the clusters.

Indicators of the fourth-generation, on which work is currently underway include (Milbergs & Vonortas, 2015, pp. 4-6): knowledge indicators, network indicators and conditions for innovations.

Knowledge indicators, which are still the subject of assessment methods as the ways in which knowledge is developed and disseminated is more complicated than in the case of patents or graduates; it can be measured only by composite indicators of investment in knowledge and complex indicators of achievement. Modern innovation rarely can be developed by individual companies, therefore most innovations require the cooperation of many different organizations. In particular, this applies to high-technology industries. The essence of the network is especially important with regard to measuring networking in the form of strategic partnership, licensing intellectual property, informal cooperation and exchange of knowledge,

individual relationships between organizations (eg. clusters). Contemporary networks are not only regional but also a national, and even global. Conditions for innovation include socio-economic policy, changes in demand, infrastructure, social attitudes, the patterns and culture of innovation, as well as evaluation of technology options.

Forms of cooperation with domestic and foreign partners

Relations between partners can be described using M.E. Porter's model of five forces². Although in the model he concentrates on intensity of competitive rivalry, there can also be enumerated two other strategies: cooperation and avoiding competitors.

Figure 2. The five forces driving industry competition



Source: M.E. Porter, Competitive strategy. Techniques for Analyzing Industries and Competitors, The Free Press, New York 1980, p. 4.

Rivalry (named also as confrontation or conflict) occurs when one of competitors feels the pressure or sees the opportunity to improve his competitive position. He can use such tactics like: price competition, advertising battles, product launches, and increased customer service or warranties. The intensity of competition varies depending on: the number of competitors, the assortment of products, frequency and effectiveness of

² M.E. Porter shows forces that determine the competitive intensity and therefore attractiveness of an industry: threat of new entrants, threat of substitute products or services, bargaining powers of customers (buyers) and suppliers, intensity of competitive rivalry.

launching new products, the level of prices, technology used, the degree of organization of the sector, the scope of customer service, etc. All mentioned factors determine the nature of competition in the sector – when the level of competition is weaker, it is easier to compete. Rivalry combines positive and negative elements. On one hand, it can be a force for improvements and innovations in the industry; on the other hand it can be a destructive force leading to a dangerous phenomenon – market dominance. Making observations on the behavior of firms in Poland it can be said that it is currently the dominant type of relationship between businesses.

Cooperation means business partnership with competitors in the industry. Motives inclining companies to cooperate are to protect themselves against strong rivals, as well as the motivation to enlarge the competitive potential of participants. Avoiding competitors is a strategy for these enterprises who are not able to confrontation nor cooperation. They are weak and have insufficient resources and competences to be a rival or a partner in business. These companies are active in a market niche.

Due to the fact that more and more business entities decide to implement the strategy of cooperation, it is worth to follow this phenomenon and its forms. The most important forms of cooperation between enterprises industry include: monopolistic agreements, short-term agreements, strategic alliances, associations, joint venture, mergers and acquisitions (Gorynia & Łaźniewska (Ed.), 2009, 116-119).

Monopolistic agreements can be defined as any agreements between businesses, which will exclude or restrict competition by: limiting production, fixing prices, dividing market, excluding entry of a new competitor, or restricting the use of new technologies. They usually arise in an oligopolistic industry. However, as monopolistic agreements deny the idea of fair cooperation between companies, they will not be a subject of further analysis.

Short-term agreements relate to cooperation in various fields, eg. marketing, corporate finance management, purchasing or selling policies.

The form of cooperation with a much longer time horizon are strategic alliances. They are negotiated between parties with a significant competitive potential in the industry. Alliances help to achieve strategic objectives, which may differ regarding participants. The main motives to fix strategic alliances are:

- entering new markets and starting cooperation with new partners;
- improvement of the financial condition and value of the company, increasing profits, reducing costs;
- getting access to new knowledge, experience, technology;
- rationalization of activities by making better use of resources;

- strengthening companies' position on the market, increasing market share:
- reducing risk.

B. Kozyra underlines that strategic alliances are good opportunities to gain knowledge and skills from partners, although it may not always be the benefit for both sides. Often before forming an alliance, companies clearly define what part of their potential can be transferred to the partner. In general, in such cases, they are divided evenly. One of the partners shall transfer modern technology, equipment as well as knowledge and employees' training procedures, and in return receives eg. access to cheaper labor or to new markets (Kozyra, 2006, p. 53).

An export consortium is a special form of alliance. It is a voluntary alliance of firms with the objective of promoting the goods and services of its members abroad and facilitating the export of these products through joint actions. They are some of the least studied internationalization networks. However, they represent an attractive means of overcoming some of the barriers that make internationalization difficult or impossible for many entities because they enable them to pool resources that may be scarce at firm-level and exploit economies of scale without losing flexibility. For this reason consortia are particularly suitable for smaller firms, whether they are going international for the first time or trying to increase their existing degree of internationalization. Members of export consortia retain their financial, legal and management autonomy. Firms are thus able to realize their strategic objectives by grouping into a separate legal entity which does not imply a loss of identity for any member. By cooperating within an export consortium, which combines the expertise and financial means of several firms, SMEs can overcome the obstacles listed above and effectively enter and develop foreign markets at reduced cost and risk. At the same time, members can improve their profitability, achieve efficiency gains and accumulate knowledge (UNIDO, 2003, p. 3). The main obstacle of the participation in the consortium is a difficulty in choosing partners having similar motives of cooperation as those of other participants (Koszewski, 2011, pp. 95-104).

It is also worth to mention that export consortia are commonly used only in some countries like Italy, Spain and Spain, where their rapid development was possible thanks to the strong support organized at the government level.

Association be concluded by small companies having weak position on the market and small opportunities of development. They do not have a bargaining power with suppliers of raw materials and production equipment, banks and public institutions. Therefore, the possibility to take

part in an association can help them to improve their position on the market.

A joint venture is a legal organization that takes the form of a short term partnership in which companies jointly undertake a transaction for mutual profit. International joint venture is broadly defined as joint venture that involve countries from different countries cooperating across national and cultural boundaries (Yan & Luo, 2001, p. 3-4). Generally each entity contributes assets and share risks. They are also widely used by companies to gain entrance into foreign markets. Foreign companies form joint ventures with domestic companies already present on one markets. D. Campbell and A. Netzer point out that foreign partners generally bring new technologies and business practices into the joint venture, while the domestic companies already have the relationships and requisite governmental documents within the country along with being entrenched in the domestic industry (Campbell & Netzer (Ed.), 2001, pp. 3-4).

Another significant form of cooperation are clusters. According to the definition of M.E. Porter, clusters are geographic concentrations of interconnected companies, specialized suppliers, service providers, firms in related industries, and associated institutions (eg., universities, standards agencies, trade associations) in a particular field that compete but also cooperate. Clusters are examples of cooperation in the system of the triple helix – between the business community, the public sector and the higher education institutions business (European Commission, 2015a). Clusters, or critical masses of unusual competitive success in particular business areas, are a striking feature of virtually every national, regional, state, and even metropolitan economy, especially in more advanced nations (Porter, 2000, p. 15; Porter, 1998, pp. 287-288). In working together SMEs can raise their productivity, be more innovative, create more jobs and register more international trademarks and patents than they would alone. The specificity of clusters lies in the fact that companies being competitors on the market, at the same time work together in those areas, where the interaction is possible. In the literature, special term "coopetition" was developed, joining together two words: cooperation and competition. In Europe there are some branch networks known that help in the development of clusters: CLUSTERPLAST (joins 14 European clusters in chemical sector), ABCEurope (Advanced Biotech Cluster platform for Europe) and ENMC (European Network of Maritime Clusters, joins 18 clusters).

Finally, the last form of cooperation between enterprises – mergers and acquisitions – undoubtedly may bring many advantages, concerning either bigger market share, reducing costs or gaining new technologies, knowhow and other synergies (Megginson et al., 2008, pp. 562-569). But due to

their character, in which the emphasis is put on management and capital control (Hooke, 1996, pp. 21-24; Frackowiak & Lewandowski, 2009, pp. 24-48), they might be treated rather as a form of capital transformation and in this sense it will be omitted in this paper.

Institutional support of companies at the central, regional and local level

In the literature relating to entrepreneurship issues there is much concern towards financial and formal aspects of supporting the entrepreneurs. In this article authors want to focus on support for the companies, which is concentrated on building the cooperation. Concerning the necessity of enhancing the cooperation between the companies authors have to indicate their development level as the strategic aspect of going forward in their strategy. Therefore, a crucial role is played by the institutions supporting their activities at different levels.

As most of the companies rise from small and medium sized enterprises, it is especially important to support their development at the local and regional level. There are some organizations which play this role, declaring consulting and integration of enterprises' environment. At the Pomeranian voivodship the leading examples are Pomeranian Regional Chamber of Commerce (Regionalna Izba Rozwoju Pomorza, RIGP) and Pomeranian Development Agency (Agencja Rozwoju Pomorza, ARP).

Pomeranian Regional Chamber of Commerce is an organization of entrepreneurs economic self-associating voluntary operating Mazury, Pomeranian. West-Pomeranian. Warmia and Kujawsko-Pomeranian and Wielkopolska voivodships (RIGP, 2015). Statutory activities of the Chamber are: representing and protecting the economic interests of the members, in terms of their activities, in particular with the State authorities, ensuring and strengthening networking, exchange of experience with domestic and foreign business organizations, shaping and promoting ethics in business. The aims of the Chamber are also: expressing the opinions on drafts of law regulations regarding business, participation, under the terms of the generally applicable provisions of law, in the drafting of legislation in this area, presenting to the state administration bodies and to local self-government and political and social organizations, the information and assessments on the functioning of the economy.

Pomeranian Regional Chamber of Commerce takes an active part in giving opinions on such domestic and international regulations as: The Law on Renewable Energy Sources, The Water Framework Directive, Assumptions for water rights, Energy Road Map 2050, Polish Energy Policy, Transport Development Strategy, Energy Security or Environment

and Water blue print. It also actively takes part in the works on Pomeranian Regional Development Strategy 2020, Long-term National Development Strategy 2020 and Medium-term National Development Strategy 2007-2015.

Pomeranian Regional Chamber of Commerce has constantly growing number of companies and organizations, joining the wide range of members, more than 200 in 2015. These members are: micro entrepreneurs, small and medium-sized enterprises as well as large, important companies of the region (RIGP, 2015). Pomeranian Regional Chamber of Commerce provides also the Enterprise Development Fund. From the point of view of supporting the cooperation between the enterprises it takes many initiatives regarding agreements with national and international organizations supporting the development of the companies and enhancing their cooperation. The domestic examples are: Gdynia Innovation Centre, Gdansk University of Technology, Municipality of Gdynia, Academic Incubators of Entrepreneurship, Kashubian Business Incubators, European Congress of Small and Medium Enterprises. At the international level such cooperation is held with: Lvov Chamber of Commerce and Industry, Belarusian Chamber of Industry - Commerce Department in Mogiley, Chamber of Commerce in Antanarivo (Madagascar), Between Industry-Chamber of Commerce Chmielnick (Ukraine), Belgo-Polish-Luxembourg Chamber of Commerce "Bepolux". Pomeranian Regional Chamber of Commerce is a member of: Association of Chambers of Commerce of the Baltic Sea, Regional Office of the Pomeranian Region in Brussels, Project Management Association Poland, Baltic Eco Cluster (BEEC), Maritime Cluster, Gdansk Construction Cluster, Malbork Tourism Cluster, what create many opportunities to develop cooperation between the members of the enterprises joining the clusters.

The interesting initiative of Pomeranian Regional Chamber of Commerce in partnership with the Inter-Organization "Solidarity" in the Gdansk Shipyard and Scientific Society for Organization and Management was implementing a project funded by the European Social Fund (POKL 8.1.3) "International cooperation element in the development of Pomeranian SMEs". Representatives of the Pomeranian enterprises had a possibility of a free trip to Germany, the purpose of which was: improving the competence of Pomeranian enterprises in international cooperation, an increase of organizational competences of managerial and technical staff. In the study visits participated the representatives of management and highly qualified employees Pomeranian small and medium-sized enterprises operating within the industries of logistics, building, energy and food.

Pomeranian Development Agency mission is working for the harmonious development of Pomerania, helping and encouraging entrepreneurs, business environment institutions and local authorities and supporting initiates and economic projects of regional significance (ARP, 2015). The main objectives of Pomeranian Development Agency are: encouraging entrepreneurship, assisting local authorities in the implementation of regional policy, supporting investment processes, handling EU funds, promotion of the region of Pomerania and initiating and participating in international cooperation projects.

Activities of Pomeranian Development Agency are carried out in three main areas. Firstly it is the implementation of financial support instruments for small and medium-sized enterprises, secondly – supporting the development of entrepreneurship and thirdly, promotion of the region and the service for investors. Within the process of implementation of financial support instruments for small and medium-sized enterprises Pomeranian Development Agency supports grant applications, what includes assessment of formal and substantive documents, promoting and providing information about the implementation of the grant programs. It organizes information meetings and training for local governments, business institutions and entrepreneurs in the delivery and settlement of projects. Pomeranian Development Agency also monitors the implementation of the grant agreements, handles requests for payment of grants and ensures technical support for administrative grant programs. It takes up close cooperation with the Polish Agency for Enterprise Development, the Marshal's Office and other institutions.

From the point of view of development of entrepreneurship, Pomeranian Development Agency provides SME research, support in financing expert and innovative projects at an early stage of development (through Equity Fund of Pomeranian Development Agency).

Equity Fund of Pomeranian Development Agency was established on 1 January 2009 as a seed fund, involved in the creation and development of technology companies with above-average potential growth rate, higher than the market level of investment risk. The funds raised from the sale of company assets are invested in further innovative business projects. The creation of this Capital Fund was 100% financed by the European Union under Measure 3.1 "Capital for Innovation" Innovative Economy Operational Program for the years 2007 - 2013. The amount of support was 35 million PLN. The Fund's portfolio of 37 companies established in the years 2009-2013. The Fund is managed by the Department of Capital Investments ARP. In 2014 Capital Fund activities included: supervision of corporate governance in portfolio companies, which takes into account the provisions of investment agreements and the provisions of the Pomeranian

Development Agency policy Code of Commercial Companies, supervision of the activities of the operating companies through active involvement in the work of their organs, involvement in the operations of companies, in order to create synergies companies within the industry in the area of products and sales, active management of individual companies by employees of the department, in order to use their experience in managing these types of entities, support for corporate bodies in the process of raising capital, mainly of the equity, preparation and implementation of the exit strategy of the companies and conducting the process of selling the assets of the fund / asset the company.

Pomeranian Development Agency also provides consultation and information on the possibilities and procedures for the use of European funds and starting a business, implementation of projects aimed at promoting entrepreneurship and supports fundraising for the investment. Pomeranian Development Agency plays an important role in regional promotion and offering services for investors interested in the activity in Pomeranian region, it supports preparation and implementation of the promotion of the region, through its own activities and joint authorities province and publishing regional economic and statistical information.

Pomeranian Development Agency carries out projects financed from EU funds, which are designed to support the development of regional and local entrepreneurship and the promotion of Pomerania. With the implementation of the projects it works with regional partners, domestic and foreign.

The examples of projects supporting development of the enterprises by Pomeranian Development Agency are: The System of Promotion and Economic Information for Pomeranian Region, Model of Strategic Competence Development Services, Pomeranian Economic Observatory, Pomeranian Business Forums, Business to Business - building a platform for cooperation between private investors and smart entrepreneurs, Patent for Property, project RespEn, Creative Business Network, Training tailored Pomeranian companies, The Economic Promotion and Information Pomerania Province (SPiIG), Design Your Profit, The International Maritime Cluster (InterMareC), Pomeranian Innovation Pomeranian Griffin (Gryf Pomorza), Pomeranian Entrepreneurship Council.

The institution cooperating closely with the entrepreneurs and investors both at the central and regional level, is the Polish Information and Foreign Investment Agency, which helps investors to enter the Polish market and find the best ways to exploit the potentials available to them. It guides investors through all the crucial administrative and legal procedures, provides access to the multifactorial information relating to legitimate and

business problems regarding the investments, supports the companies in finding the appropriate partners and suppliers, together with new locations. In order to run the service to investors it was established a network of Regional Investor Service Centres across Poland, having as their goal enhancement of the regional investor services quality. Such offices ensure access to the latest investment offers and to regional microeconomic data. Their task is also to strengthen relations and contacts between the investors and local authorities. Polish Information and Foreign Investment Agency is supporting such initiatives like Go Global and Go China, enhancing the Polish investors in creating opportunities and investing abroad.

The example of such regional approach may be Invest In Pomerania Initiative, which was established in 2011 to link the activities of all the key players related to the operation of foreign investors in Pomerania. The members of the initiative are: Marshal's Office, the city of Gdansk, Gdynia, Slupsk and Sopot, Pomeranian Special Economic Zone, Slupsk Special Economic Zone, InvestGDA and Pomerania Development Agency, the coordinator of the initiative. The statements of investors considering the region as a potential location for new projects show that they appreciate the opportunity to work with the regional institutions in the system of so-called "one stop shop" (Invest in Pomerania, 2015).

An important effect of the activities of Polish Information and Foreign Investment Agency and its regional offices is the expansion of Business Services Sector (BPO/SSC/IT services) in Poland (PAIiIZ, 2015). Apart from the evident advantages in creation of job creation and regional development, it possibly creates the opportunity of tightening the cooperation between business and science, as the new sites are usually planned in the cities and regions offering the wide range of higher education institutions, including universities, technical universities and research institutes. Invest in Pomerania implemented also the project "Smart Pomorski Up" which aim was to improve the chances of young people in the labour market, giving the possibilities of training in the context of the priority of BSS services, such as BPO / SSC, ICT, logistics or production. Students realized together with companies from the region the projects in which they gain professional qualifications, which are currently the most sought after Pomeranian by employers on the labour market.

The central level institution is also Polish Agency for Enterprise Development (Polska Agencja Rozwoju Przedsiębiorczości, PARP), which is a government agency providing support to entrepreneurs within the implementation of competitive and innovative projects. It declares as the primary objective to develop the sector of small and medium-sized enterprises in Poland. To support entrepreneurs financially, PARP uses the

government budget funds and European Funds. In the 2007-2013 financial perspective, the Agency was responsible for the implementation of measures under three operational programmes, concerning Innovative Economy, Human Capital and Development of Eastern Poland (PARP, 2015).

One of the main tasks of PARP is supporting export, what comprises strengthening of the competitive position of Polish enterprises on foreign markets and making it easier for SMEs to make contacts with foreign companies in their business. Therefore, PARP offers Polish SMEs an opportunity to take part in economic missions organised around the world, cooperative exchanges and fair events. Enterprise Europe Network, operating under PARP, arranges opportunities for the entrepreneurs seeking partners abroad to publish their company profiles in the Cooperation Offers' Database available for access by about 600 network units in the world. Moreover, Enterprise Europe Network offers comprehensive services covering information, training and analysis measures in the field of European Union law and policies, business activity, access to sources of financing, internationalisation of enterprises, technology transfer and participation in EU framework programmes.

Among many activities of Polish Agency for Enterprise Development there is a special tendency since 2013, to make projects which enhance entrepreneurs to cooperate with their business environment organisations and research units. These activities were addressed to enterprises under motto "Cooperation repays!" with the instruments and programmes that facilitate access to information, funding and partnerships (PARP, 2015). In 2015 Enterprise Europe Network at the Polish Agency for Enterprise Development and Investment Promotion Section in collaboration with the Consulate General in Cologne, ZENIT GmbH, the Focal Point for EU Research Programmes, University of Warsaw and the Council of Research Institutes launched a cooperative exchange designed for companies interested in implementation of joint Polish-German projects under the EU Framework Programme Horizon 2020. This programme of cooperation is addressed to research institutes and companies from the innovative industries like: ICT, Energy and Environment, NMP (Nanotechnologies, Advanced Materials and Production) or Transportation.

The authors underline also a huge impact of Bank Gospodarstwa Krajowego (BGK) to supporting entrepreneurship in Poland. It is the only state-owned bank in Poland. Since its inception, the BGK contributed to the socio-economic programs, government programs and local government and regional development. Currently BGK, both realizes and is the originator of many programs for the economic development of Polish enterprises (BGK,

2015). It is a pillar of the government's investment program, under which organizes long-term financing of investment projects, including investments of strategic importance for the national economy and the interests of the state. It conducts programs to promote exports and infrastructure programs and develops system guarantees. It participates in the financing of local governments, utility companies and health care facilities, as well as in the implementation of programs related to the improvement in the housing market and access to housing. It is the leading institution in the process of consolidation of public finances and cash flow system in Europe.

BGK provides de minimis guarantee program, implemented in the framework of the "Program to promote entrepreneurship through guarantees and warranties BGK". It fits in two aspects of economic policies of the government in the context of a slowdown - counter-cyclical and striving for continuous improvement of working conditions for entrepreneurs. Guarantees de minimis are very popular with entrepreneurs, evidence of the scale of the program is the number of beneficiaries, more than 78,000 companies. Since the beginning of the program by the end of January 2015, BGK de minimis aid granted a guarantee for a total amount of approx. 17.34 bln PLN. With the guarantee of a de minimis, banks granted loans worth a total of approx. 30,88 bln PLN (BGK, 2015).

Before entering de minimis guarantees program, BGK secured by guarantees only working capital loans, related to the financing of the current business activities. The analysis conducted by the BGK showed that among guaranteed loans BGK's most often used depend on the providers and the purchase of materials, having periodic liquidity problems. As many as 42% of them are from the commercial sector. BGK expanded the program to cover the investment activities will be what was particularly important also for the manufacturing sector.

The program covers the majority of banks operating in Poland, which makes this product available in every part of the country. The process of guarantees is still the same - the company applies for protection of BGK in the same bank where it takes a loan. The procedures will remain transparent and business friendly. Basic conditions for new guarantees are:

- the purpose of the loan: investments or expenses that affect the development of the company;
- guarantees are granted for 24 months from 19 November 2013 to 31 December 2015:
- the maximum amount of the guarantee is 3.5 mln PLN, or 60% of the
- maximum warranty period is 99 months;

- commission rate for the given guarantee of 0.5% per annum.

According to the BGK, increased investment activity has a direct impact on economic growth. The projected increase in expenditures on fixed assets for 2014 was 4.5 percent (BGK, 2015). But the scale of the contribution of investment in the acceleration of growth may be limited compared to previous episodes of economic recovery after periods of slowdown. Particularly affected by the negative effects of this factor will be SMEs, which was directed towards a large part of the EU funds in the current term. In the years 2006-2011 SME investments accounted for between 46 and 50 percent of total expenditures of enterprises in Poland and about one-quarter of all investment in the economy.

Instruments supporting entrepreneurs in accessing funds to finance development in the period of low economic activity and until the launch of funds under the new financial perspective can be guarantees repayment of loans intended for broad investment objectives, ie. the standard investment loans and working capital loans to finance current expenditure associated with running investments (eg. credit to finance VAT) and other working capital loans to finance development goals (expenses that affect the development of the business such as. to create a new property or upgrading an existing one, the implementation of a new product, introducing a new process).

The guarantees will facilitate access to finance broadly defined investment objectives as well - as the instrument is not binding to the actual transfer of funds – it will be an element contained in the nature of support that is planned in the new financial perspective. It is one of the forms of *de minimis* aid granted under the permissible aid to cover a loan or investment rotating micro, small or medium-sized enterprises (SMEs).

Warranty *de minimis*, is not a cash grant and is not directly related to the transfer of funds entrepreneur, do not produce any tax consequences.

For working capital loans guaranteed *de minimis*:

- is granted for a maximum period of 27 months,
- protects up to 60% of the loan,
- does not include interest and other costs associated with the loan,
- is secured promissory note entrepreneurs,
- commission rate guarantees have been given is 0.5% of the guarantee on an annual basis.

For investment loans guarantee de minimis:

- is granted for a maximum period of 99 months,
- protects up to 60% of the loan,
- does not include interest and other costs associated with the loan,
- is secured promissory note entrepreneurs,

 commission rate guarantees have been given is 0.5% of the guarantee on an annual basis.

The most important effect of the *de minimis* guarantee scheme is a positive impact on employment in companies. Raising additional funds for the development of companies through guarantees stopped the job cuts, and in some companies allowed to increase it. It is estimated that in all companies which are members of the program it created a total of approximately 22.5 thousand jobs, which is noticeable in the scale size of the economy. A very important conclusion also relates to the development of companies benefiting from the guarantee. Almost 60% of them could make investments as a result of the receipt of the loan with *de minimis* guarantee, and by changing the position of the company (BGK, 2015).

Moreover entrepreneurs who start business activities, as well as entities that exist on the market and have plans concerning fast development may receive support from business environment institutions. These institutions are: entrepreneurship incubators including academic ones, science and technology parks and technology transfer centers. They support aspiring entrepreneurs since the inception of the idea to create a company up to achieving market stability. Incubators' employees emphasize that they offer "space, knowledge and networking". Incubators' offer include: lending legal personality, bookkeeping, legal, tax, business (soft and hard skills trainings) and IT assistance, access to office infrastructure, promotion through the website of the incubator, training and mentoring. Conferences, trainings and seminars organized for entrepreneurs are an excellent opportunity for them not only to get knowledge, but also to acquire new contacts and find potential partners for the future cooperation. Incubators and science parks also offer help in finding partners and in applying for EU grants to start a business. Moreover they offer financial assistance in the form of capital investment in new business through the acquisition of shares and recapitalization of the company by a co-investor. In Poland there are 46 entrepreneurship incubators, 50 academic incubators and 42 science and technology parks.

Barriers of the development of cooperative relations in Poland

As it was already been said, innovation and creativity are the result of cooperation. The weak position of Polish enterprises in this area is caused by a set of substantial barriers. Among them there can be enumerated psychical, mental, organizational, institutional and market barriers.

The most significant barrier of the development of cooperative relations in Poland is low level of companies' ability and willingness to cooperate with other entities. It remains a strong psychological barrier. This is due mostly to the lack of confidence between institutional partners in business. This threat is enhanced by another obstacle – the lack of skills in the field of cooperation. Educational system in Poland is highly focused on the individual achievements of students and requires no ability to cooperate (Zadura-Lichota (Ed.), 2013, pp. 46-47). Moreover the way of teaching in Polish schools and universities does not motivate young people to work together, as methods like case study are quite rarely taught adequately, even though they often appear in the study programs. It should be also underlined that students in Polish schools have problems to acquire and develop soft skills like: building motivation, developing creativity, supporting initiatives, putting own goals, building self-confidence, expressing own opinions and making confrontations with the point of view of others (Bizon & Poszewiecki (Ed.), 2013, pp. 103-118). All above mentioned problems contribute to limit the dialogue between potential partners. The situation is worsened also by the mental barrier – the lack of sufficient knowledge about the forms of cooperation that can be implemented on the market. Entrepreneurs do not know whether there are clusters and regional networks already established close to their area of activity. They also ignore benefits the cooperation can bring and may result in the transfer of knowledge, diffusion of innovation and finally increasing the company's competitive position. Finally, this low level of intensity of collaboration consequently determines the degree of innovation of Polish economy.

Organizational barriers relate to the actual shape of Polish economy, in particular poor formal relations between entities, poor cooperation of companies in the field of R&D and superficial forms of cooperation in economic life.

Institutional barriers are associated in particular with the undeveloped R&D sector, insufficient development of business environment, inefficiencies of central and local governments as well as bureaucracy limiting access to public funds.

Finally market barriers are connected with the condition of Polish economy and its competitiveness and actual phase of the business cycle, low level of innovation in the economy, low number of patents obtained and limited financial resources (BOSSG, 2015).

Analysing barriers of the development of cooperative relations in Poland we cannot forget the importance of activities towards supporting the expansion of Business Services Sector (BSS) in Poland. If it comes to job

creation and overall regional development, it may possibly generate the profits for the economy. It also comes together with general opportunity of tightening the cooperation between business and science, as the new sites are usually planned in the cities and regions offering the wide range of institutions of higher education, universities, technical universities and research institutes. However, the assessment of these advantages, coming from this positive trend, is varied in the context of building innovation by cooperation (PAIiIZ, 2015). There are not so many examples of such cooperation resulting in scientific publications, new patents or new startups. There are few projects realised by universities together with companies placed in the same region and this opportunity should be strongly emphasized and enhanced. At the moment localization of BSS centres is positively correlated with the presence of institutions of higher education because of good access to graduates having professional qualifications, which are appreciated by employers on the labour market. There is still space for creation and development of new ideas in teamwork created by business and science representatives.

Conclusions

While characterizing the position of Poland using the model of T. Ozawa, it has to be underlined that the level of economic development of Poland is now between the second and third stages. It means that the development of our country is possible thanks mainly to investments, as well as progressively to innovations. However, conclusions made on the basis of scoreboards published by official offices, describing the stage of innovation development, underline that Poland is performing below the EU average for most indicators.

From the point of view of M.E. Porter it should be also noticed that Polish companies seem to opt for confrontation, as the main market strategy, basing on the development of one company while worsening the position of rivals at the same time. It looks, therefore, as if Polish entities are not ready or do not see necessities for cooperation with actual competitors.

In the context of tendency of entering the new stage of development in the future, involving the enterprises into wider cooperation, the efforts of organizations and institutions that are creating networking forums of exchange, contacts and knowledge transfer have to be greatly appreciated. Most of the institutions functioning in Poland works hardly on the capital facilities, making easier to get financing for the companies, in the forms of incubators, capital funds, guarantees for enterprises. Many of them are also

dedicated to ensuring the attractiveness of Polish regions and a whole country for potential investors, especially foreign ones. Creating the opportunities for the companies in the form of easier access to capital is a core matter, taking into the consideration the stage of development of Polish economy, which is only twenty five years after the milestone of the transformation. However, a step ahead is needed in the future, that will allow not only to collect capital, but also to convince companies to change their strategic activity on the market from competition to cooperation. This must be done in spite of the existing barriers in the development of cooperation between enterprises, especially psychical, organizational, institutional and market ones. The possibility to supplement the competitive potential by joining resources and competences of several entities, will contribute to improvement of strategic and operational efficiency, and thus faster implementation of objectives and the achievement of outcomes. It requires strong and wide support regional and central institutions in building efficient networks to gain results mentioned above. Widespread cooperation between companies and thanks to the spillover effect, may contribute to accelerate Polish economy to the innovationdriven stage.

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