

# Innovation strategies in SME's economic growth and job creation in economy

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## Abstract

SMEs and entrepreneurship are key to ensuring economic growth, innovation, job creation, and social integration in the EU. The SME sector has a crucial role to play in creating new jobs, economic growth and innovation in socioeconomic development. The paper aims to address the critical role of small and medium-sized companies by investigating innovation management strategies in the SME sector. The goal of the present paper is to analyze the innovation strategies of SMEs and to provide an overview of the performance of Polish SMEs against those in the European Union. The main method in the study is desk research based on secondary statistic data. The method made it possible to prove that innovative strategy is a necessary condition to improve the competitiveness level in the SME sector. The main contribution of this research is to highlight the impact of innovation strategies on the competitive level of the researched entities for SMEs. The linear model developed for the "innovation expenditure" factor and forecast for 2-year period amply make it clear that SMEs continue to tread a positive growth trend.

**Keywords:** Entrepreneurship; strategy; small and medium-sized enterprises; economic growth; innovation; global economy; strategic alliance; cooptation; competition, cooperation

## 1 Introduction

Small and medium-sized enterprises (SMEs) form the backbone of the European economy, contributing significantly to European Union's (EU) growth. The European Commission considers SMEs and entrepreneurship as the key to ensuring economic growth, innovation, job creation, and social integration in the EU (European Commission, 2016). As the SME sector has a crucial role to play in creating new jobs, economic growth and innovation, these economic units are acknowledged worldwide as the key actors of socioeconomic development. SMEs make up a majority of the enterprises in all the Member States (Muller, 2016). They are highly diverse and engage in activities ranging from food production to the production of high-tech space exploration equipment, from retail services to the provision of highly specialised professional services, from focusing primarily on serving domestic customers to focusing mainly on the export markets. The paper aims to address the critical role of small and medium-sized companies by investigating the innovation strategies of the SME sector (Karadag, 2015). An overview of the performance of Polish SMEs against those in the European Union is also provided. The main method in the study is desk research based on secondary statistical data. This method made it possible to prove that innovative strategy is a necessary condition to improve competitiveness level in the SME sector. The main contribution of this research is to highlight the impact of innovation strategies on the competitive level of the researched entities that are SMEs. The linear model developed for the "innovation expenditure" factor and forecast for 2-year period make it clear that SMEs are set to continue a positive growth trend.

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## 2 SMEs: definitions and importance

SMEs are defined as businesses that employ less than 250 people and have an annual turnover of less than €50 million or their balance sheet total is less than €43 million (European Commission, 2016). They comprise three categories of enterprises: micro, small, and medium-sized enterprises. The size-class definition is based on the definitions used in the structural business statistics (SBS) database maintained by Eurostat, and the definition is solely based on the number of people employed. Enterprises employing fewer than 250 persons are a very important part of the economy, as they represent around 99% of all enterprises and employ a large number of people.

It is known that entrepreneurial activity and technological change lead to globalization, which in turn leads to further opportunity for entrepreneurial initiative both for SMEs and multinational corporations. In 2014, SMEs employed almost 90 million people, i.e. 67% of total employment and generated 58% of the sector's value added (Muller, 2015). About three-quarters of SMEs are active in the five key sectors: wholesale and retail trade, manufacturing, construction, business services and accommodation and food services. While SMEs account for practically the same share of the overall number of enterprises active in the Member States, their economic contribution varies markedly. Table 1 shows the number of enterprises, turnover and persons employed for 2015 and the share of enterprises with fewer than 250 persons employed in several selected countries.

Table 1. The number of enterprises, the number of the employed, and total revenues in enterprises in 2015 (previous year = 100%)

	Enterprises		Turnover (mln. Euro)		Persons employed	
	Total	<250 persons employed,%	Total	<250 persons employed	Total	<250 persons employed
EU28	23500341	99,8	27309775	55,8	137444935	66,3
Czech Republic	1001048	99,8	444231	56,9	3591896	67,6
Germany	2408352	99,5	6061400	47,5	28248410	62,9
Spain	2465540	99,9	1789292	62,2	11109702	72,8
Italy	3683127	99,9	2887615	68,8	14225278	78,7
Netherlands	1092243	99,9	1412433	61,8	5451082	65,7
Poland	1606559	99,8	921350	56,0	8652063	68,3
United Kingdom	1940947	99,7	4348297	47,0	19209717	53,5

Source: Authors' elaboration based on: Report on Small and Medium-Sized Enterprises in Poland, PARP 2017.

The OECD finds that between 25 and 70 per cent of exporting companies are micro-enterprises (with less than 10 employees), and they account for only a limited share of total export value (OECD, 2015). However, micro-enterprises in wholesale and retail trade services play an important role in driving international trade. They comprise around three-quarters of all enterprises in the sector that engage in international trade, and around 15–50 per cent of all imports and exports of the sector. Interestingly, the enterprises that provide inputs to global supply chains are particularly productive exporters (Thomas, 2002). The productivity premium for exporting is driven by supplier companies, which also pay higher wages than other exporters. Enterprises that contribute to global supply chains by assembling final goods have lower productivity than other exporters but are not found to pay significantly lower wages. Overall, the suppliers in the global supply chain were found to have a larger workforce on average than other exporters. Thus, the SME engagement in trade boosts productivity. Importantly, the differences in trade participation across size classes and countries “highlight important barriers to participate in international trade, particularly for smaller firms, and in turn stress the importance of examining indirect channels of integration into global value chains” (OECD, 2015).

## 3 Innovative SMEs as important engines of job creation

Innovation is regarded primarily as the implementation of a new or considerably improved product (goods or service) or process, a new organizational method or a new marketing method in business practice, at workplace or in the realm of relationship with the environment (Schumpeter, 1934).

Entrepreneurs play a critical role in the management of an enterprise (Mccarthy, 2016). The planning strategy helps entrepreneurs anticipate change in the environment, deal with investors and attract funds. Planning can aid in thinking and decision-making. Managers of small companies face specific constraints that set them apart from large organisations and as a result, their strategic behaviour is different. Small enterprises are often dependent on a limited number of customers and suppliers. Since they have rather limited options, they should focus on a niche segment, which is the only viable strategy for a small organization (Porter, 1991). Entrepreneurship and globalization are two much-examined forces. Unfortunately, very little has been published on the intersection of small and medium-sized enterprises and the global economy (Susman, 2007). Most of these enterprises (about 94 %) are independent; they are neither controlled by another enterprise nor control another enterprise by themselves. Dependent enterprises (those that are controlled by another enterprise and/or control another enterprise, and thus

belong to an enterprise group) are important in terms of employment and turnover, especially in Denmark, Estonia, Latvia, Finland, Sweden and Norway. Therefore, a large proportion of total growth created by SMEs can be attributed to dependent enterprises. Out of the total number of companies, 0.4% of the enterprises employ 250 or more persons. Therefore, these are large enterprises if the definition for a SME is considered. They contribute significantly to employment and turnover, especially in Croatia, Finland and Sweden. Small and medium-sized enterprises often have difficulty in competing in the global economy unless they collaborate with domestic or foreign partners. Increased global trade is challenging for innovation in SMEs, which can become more competitive at home and in foreign markets as stand-alone entities or as members of supplier and customer networks. SMEs are turning increasingly to innovation as a source of competitive advantage in order to protect their home markets as well as to participate in expanding foreign markets. The most compelling issues facing SMEs include innovation as a competitive strategy, in particular, and network dynamics in helping SMEs to overcome resource deficiencies (Susman, 2007). There are considerable differences between innovative and non-innovative companies in terms of labour market outcomes. Innovative enterprises tend to be more productive, create more jobs and hire more female workers. They also employ more skilled workers, which means they employ more educated workers and offer more on-the-job training (Mellor, 2005). The economic environment in which these entities operate is constantly changing, and doing business is important in the trading economy, recognising that those SMEs that are engaged in export and import of goods are more productive than those that do not. This difference is particularly pronounced between exporters and non-exporters. Exporters and importers typically employ a large workforce, which grows with increasing exposure to export. Moreover, exporting and importing firms pay higher wages, which increase on average with the number of years a firm has been active in the export market.

Small and medium-sized enterprises play an important role in economic development and job creation (White, 2017). While the general features of this role are understood, there are many features of this that require more research. Of particular interest to countries and regions around the world is the importance of the traded economy — that part of the economy connected to global markets. Estimates from 132 economies revealed that firms that sell in global supply chains are more likely to grow, innovate and pay their workers better (White, 2017). From 2003 to 2017, the share of SMEs in total full-time employees in the formal sector increased by 3.6 per cent (31.2 to 34.8 per cent). Furthermore, full-time female permanent employees in the formal sector are more likely to be found in SMEs than in large firms (White, 2017). In developed economies, micro-enterprises (defined as having fewer than 10 employees) account for more than one-fifth of total employment in most of the economies, rising to 46 per cent in Italy and 59 per cent in Greece.

Although theory suggests that there is no relationship between firm growth and firm size, evidence is mixed. Some suggest that when a company's age is taken into consideration, there is no relationship between firm size and employment growth. More recent evidence shows how smaller and younger businesses experience greater variance in employment growth; they exhibit positive and negative growth alongside changes in aggregate demand. Among growing firms of all sizes, smaller firms are associated with higher positive employment growth. Thus, SMEs are important engines of job creation even during times of economic downturn.

The distinction between invention and innovation was originally attributed to Schumpeter and has become part of economic theory (Schumpeter, 1934, 1961). The relationship between invention, innovation and entrepreneurship has involved much discussion (Brichan, 2011). According to Porter, "invention and entrepreneurship are at the heart of national advantage" (Porter, 1990), and Burns reports that "invention is the extreme and riskiest form of innovation" and posits that "invention can be successfully exploited in the entrepreneurial environment" (Burns, 2007). The inter-relationship between invention, innovation and entrepreneurship is both of theoretical and practical significance. It may involve inventors and entrepreneurs in all aspects of product, process or service development but also it can involve them separately (Brichan, 2011). The latter case is exemplified historically by Adam Smith who observed that "all the improvements in machinery, however, have by no means been the inventions of those who had occasion to use the machines" (Smith, 1776). He also considered the way in which the division of labour promoted specialised inventions. This is articulated by Marx who notes "invention then becomes a branch of business, and the application of science to immediate production aims at determining the inventions at the same time as it solicits them" (Marx, 1858). And that it "is of importance not only for increasing the wealth of nations in the narrow sense of increased prosperity, but also in the more fundamental sense of enabling men (and women) to do things which have never been done before at all. It enables the whole quality of life to be changed for better or for worse." It can mean not merely more of the same goods but a pattern of goods and services which has not previously existed, except in the imagination. It has been observed that the level of innovativeness of Polish enterprises significantly departs from the levels recorded in most EU countries (Ejsmont, 2014). Polish companies in the SME sector occupy one of the last places in terms of innovation. Compared to other EU countries, the number of Polish companies focused on R&D is relatively small (Ejsmont, 2014).

## 4 Network strategies of small business

Today, for all enterprises, being successful in business is very important. It is achieved by having the access to the global market, exchanging information and data with the partners and by adopting to the world standards which involve modern information and communication technologies that make the networked business possible. In the field of internationalization, many researchers have studied different aspects of strategic alliances, which are cooperative agreements between two or more organizations for attaining mutually beneficial goals. These studies almost exclusively deal with large multinational companies because only these entities are capable of engaging in alliances (Tipuric, 2002). Therefore, the linkages, networking and clustering have become the inevitable fact in the contemporary business world. SMEs in general suffer from several disadvantages concerning technical competence, shortage of qualified employees, capital and international experience. In many cases, even a SME can be innovative, but more often it lacks technical capacity and necessary competence for product development for sustained competitive advantage. Moreover these companies lack the resources and expertise to bring their products to the market.

### 4.1 The strategic alliances of SMEs

By forming innovation support networks, small businesses with complementary skills can maximize their innovation output from limited research and development (R&D) resources. Nevertheless, 'networking' is not a 'cure' to the human, financial and technical resource difficulties of small businesses. Deficient innovative capacity is unlikely to be overcome by replacing R&D activity by external 'know-how' and technology. Internal R&D not only produces new information but also helps in acquiring external know-how and technology.

The innovative capacity of small businesses is best served by developing a balance between the technical and network support aspects of an enterprise, rather than relying solely on other companies. The strategic alliances not only increase the competitiveness of the small enterprises that join them but are quite often condition a *sine qua non* for their survival. Modern forms of cooperation influence all the participants of particular markets and sometimes even change the whole markets.

The main purpose for SMEs to join a strategic alliance is with the intent to create additional value and profit. Each partner must, through networking, create larger value than it can be done individually. Otherwise the strategic alliances and virtual organizations would make no sense. Strategic alliances imply various advantages for their members. With relation to other forms of cooperation, they are in more favourable position because they can be established faster. They are less risky and more flexible. The alliances often block their competitors and create safe and stable distribution channels without large investments. Strategic alliances also enable smaller enterprises to achieve economy of scale by drastically reducing the costs necessary for entry into a market and give them the possibility of utilization synergic effects that appear during cooperation.

### 4.2 Coopetition as a way to increase SME's capability

Coopetition is defined as a phenomenon of simultaneous cooperation and competition of two entities that strive to better achieve their goals or work towards the common end (Bengtsson, 2000, p. 411). This is how competition is embracing cooperation as the way of the future organisations. This shift in emphasis has not eliminated competition but rather highlighted the opportunity for institutions to work together to lower the cost (Baron, 1995).

The relationship is called "coopetition" when two enterprises cooperate in some activities, such as in a strategic alliance, and at the same time compete with each other in other activities. It is of great importance when SMEs in some respect help each other and to some extent force each other towards, for example, more innovative performance. It is of interest to know how it is possible to combine cooperation and competition in one and the same relationship, and how such a relationship can be managed. The coopetition relationship can have different shapes depending on the degree of cooperation and the degree of competition. On one hand, there is a relationship between two competitors consisting merely of cooperation, a traditional cooperative relationship. On the other hand, there is a relationship between two competitors consisting merely of competition, which is a competitive relationship. Between these two it is possible to have at least three different types of coopetitive relationships depending on the degree of cooperation and competition. In Figure 1, three different types of coopetitive relationships between actors are identified (Bengtsson, 2000).

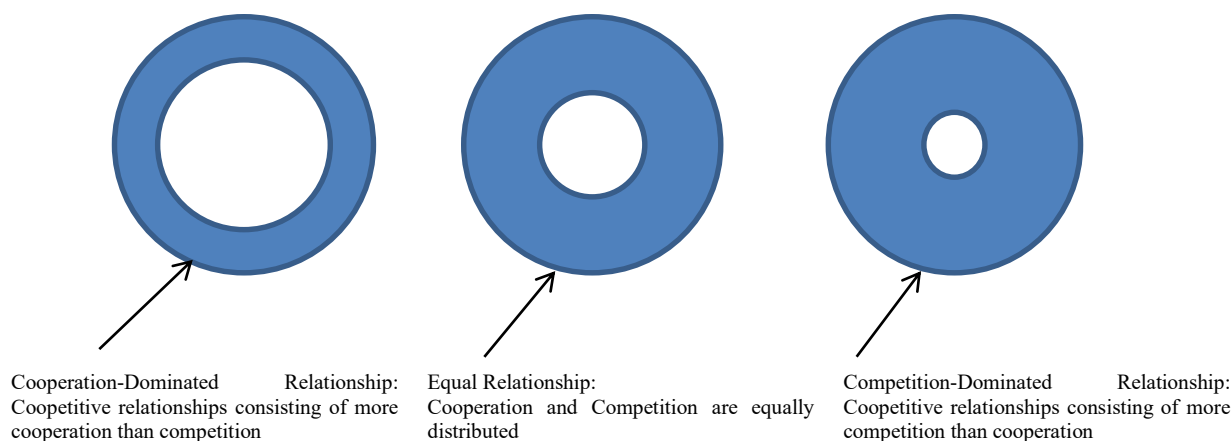


Figure 1. The types of competitive relationships between competitors

Source: Authors' elaboration based on: Bengtsson, 2000.-p.416.

The idea of competition, which is one part of the cooperative relationship, is built on the assumption that individuals act to maximize their own interest. The different self-interests are in conflict with each other, which in consequence means that people compete against each other to best fulfill their own self-interests. The idea of cooperation, the other part of the cooperative relationship, is based on a diametrically opposite assumption. A precondition for cooperation is that SMEs participate in collective actions to achieve common goals and to create a win-win relationship. In such a relationship, the well-being of the actors involved is more important than one actor's profit maximization or opportunism. Actors involved in win-win relationships all contribute to the total value created in the relationship, and they are satisfied with a smaller share of the profit to maintain the relationship.

Definitely, one of the ways to increase the capability of enterprises, especially enterprises of the SMS sector, to create innovative solutions is to implement the cooperation strategy that consists of developing market relationships with suppliers and clients as well as competitors. Such cooperation sets out to realize a specific undertaking, which is possible thanks to a combination of selected resources and competences of parties simultaneously cooperating and competing with one another (Ejmont, 2007). Therefore, for enterprises whose aim is to effectively compete with market rivals by creating and commercialization of innovations, there should be specific mechanisms designed in order to generate innovations.

One of the ways of strengthening the innovative potential of these enterprises striving to work out and implement innovative solutions is to develop relationships with other market participants. This type of relations are termed pro-innovative, i.e. orientated towards creation of new solutions through mutual effort. The enhanced cooperation aimed at cooperation and healthy competition in terms of innovativeness might contribute to the increase in the level of the innovativeness of SMEs.

## 5 Contributions of innovative SMEs to economic growth

There is a direct link between innovation and the economic growth of a region. Through innovation, local businesses become more competitive, more productive and more profitable. Their expansion leads to creating more jobs, often demanding higher-skilled, better-paid workers. This is why innovation is valued by national, state and local governments. When innovation is part of the businesses that are competing in national and global markets, the rewards of innovation are greater. Also, improving SMEs' access to finance and finding solutions to unlock sources of capital is crucial to enable this potentially dynamic sector to grow and provide jobs. Expenditures on innovation activities between 2008 and 2015 show an upward trend, mainly due to the activity of industrial enterprises. In 2015, the innovation expenditure of Polish companies increased by a record 16.3%, and it was the best result in the period from 2009 to 2015 (PARP, 2017). Trends are less favourable when it comes to the percentage of innovative companies. As far as industrial enterprises are concerned, between 2008 and 2015, the percentage of innovative companies in Poland were at a similar level, which was about 17.5%. In the case of companies providing services, it decreased from 13.5% to 9.8% (PARP, 2017). Between 2008 and 2014, the scale of investment and innovative activity undertaken by companies was characterised by high fluctuations, which cannot be explained by fluctuations in the country's economy (see Figure 2).

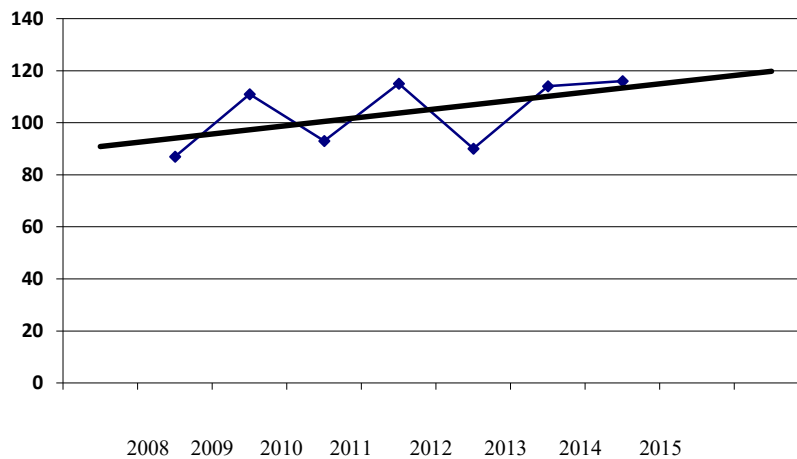


Figure 2. The dynamics and the forecast of innovation expenditure in enterprises in the years 2008-2015 (previous year = 100%)

Source: Author's elaboration based on: Report on Small and Medium-Sized Enterprises in Poland, PARP 2017.

The linear model developed for the “innovation expenditure” factor, and its forecast for a 2-year period clearly indicate that positive growth trend will continue despite the model's weak statistical parameters. This is a result of uncertainty faced by Polish companies (PARP, 2017). Small and medium-sized enterprises (SMEs) often have difficulty competing in the global economy unless they collaborate with domestic or foreign partners. Increased global trade represents the innovation challenges for SMEs, which can become more competitive at home and in foreign markets as stand-alone firms or as members of supplier and customer networks. SMEs are turning increasingly to innovation as a source of competitive advantage in order to protect their home markets and participate in expanding foreign markets. The most compelling issues facing SMEs include innovation as a competitive strategy and network dynamics in helping SMEs to overcome resource deficiencies and create the innovations that lead to job creation and economic growth in the global economy.

Experimental features of the study concerning the strategic contribution of SMEs to job creation are critical to economic development of the country (Obi, 2018). These data describe demographic data of SME owner/managers across strategic industrial sectors of a nation in transition, in order to understand the influence of their background factors on the issues relating to SMEs' contribution to economic development (Obi, 2018). The data showed that SME contributions are very essential to improving economic development, especially in the areas of job creation, poverty alleviation and living standards of people. These aspects of development are extremely important to national economies.

It is relevant to consider the research issues relating to estimation of SMEs' contribution to a nation's economic development. The results of studies determining the presence or absence of a significant relationship between the operations of a small enterprise and the creation of jobs are interesting (Obi, 2018). The null-hypothesis  $H_0$  that was formulated to guide the analysis of data obtained stated that small-scale enterprises are not significantly contributing to job creation. Data obtained were analysed using the chi-square ( $\chi^2$ ) test at 5% level of significance (Obi, 2018). Chi-square test measured the relationship between the operations of small-scale enterprises and job creation. The results showed that the calculated  $\chi^2$  value was greater than  $\chi^2$  table value at 5% (0.05) level of significance. Thus, the Null hypothesis ( $H_0$ ) was rejected. The result of the hypothesis tested revealed that there is a positive and significant relationship between the operation of the small-scale enterprises and job creation (Obi, 2018). Chi-square test measured the relationship between the operation of small-scale enterprises and job creation. In other words, small-scale enterprises are making a significant impact on job creation. This finding supports the significance of SMEs in the economy, above all in the area of job creation.

## 6 Conclusions

The evidence from the data presented in the paper show that small and medium enterprises are significant drivers of economic development. The facts generated from the data have significant implications for practical application because governments and authorities must focus on initiating programmes that encourage the creation and sustainable operations of SMEs, while also motivating the existing SMEs to maintain their performance and growth levels.

To summarize, small and medium-sized enterprises play an important role in economic development and job creation in the global economy, and innovation strategies adopted by SMEs can act as a key instrument to accomplish their critical mission in the regional, national and global economy.

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