

ANALYSIS OF SMALL AND MEDIUM ENTERPRISES FUNCTIONING IN THE POLISH ECONOMY

^aKATARZYNA BROŽEK

*Kazimierz Pułaski University of Technology and Humanities in Radom, Street: Chrobrego 31, 26-600 Radom, Poland
email: a.k.brozek@uthrad.pl*

Abstract: Small and medium-sized enterprises account for 99.76% of all companies operating in the Polish economy. Their numbers directly affect the level of employment, and these entities have consequently an extraordinary impact on welfare and social wellbeing. With these arguments in mind, it is extremely important to analyze the SME sector from both scientific and practical point of view. Consequently, the general objective of this article was to analyze the SME sector both theoretically and empirically. Thus, the first part of the discussion is devoted to report theoretical aspects. In contrast, the second part of the paper focuses on the empirical approach of the SME sector. The selected indicators describing the situation and financial condition of small and medium enterprises were analyzed. Statistical analysis was supplemented with own calculations.

Keywords: analysis, Poland, MSP sector

1 Characteristics of the Company – Theoretical Implication

The concept of entrepreneurship has permanently occurred in the Polish language during the transformation period. "Systemic economic changes at the turn of the 1980s and 1990s have given impetus to millions of people, and resourcefulness and economic activity have been activated, supported, created, stimulated, analyzed and researched" (Targalski, 2014, p. 21). Literature of the subject defines entrepreneurship in two aspects. In economics, it is treated as: "the effect of work, activity, behavior in the market, activity that translates into economic results" (Targalski, 2014, p. 21). In the case of management, entrepreneurship is understood as a characteristic of performance, which is expressed as steering efficiency. Entrepreneurship is also considered as a co-dependence of entrepreneurial and innovative activities aimed at pursuit of success. Although entrepreneurship has a wide range of issues, it is difficult to find in the literature a strict definition of this concept, because it is discussed in a descriptive way, it contains many meanings and ranges that are not a subject to scientific schemas. As it is described by J. Targalski, entrepreneurship is most often described as:

- the feature of human activity, the so-called, attribute definition;
- The activity of the small and medium-sized businesses sector, i.e. the SME sector or human activity, which is undertaken to meet their own needs and to eliminate discomfort, the so-called, subject definition;
- an activity that involves systematic work on the emergence, development and stabilization of one's own company, the so-called, process definition, functional.

The multi-faceted perception of entrepreneurship leads to define it as the result of the interactions of elements it consists of, that define its dimensions:

- business entity, i.e. entrepreneur,
- implementation of the entrepreneurship process,
- organizing business activities,
- Entrepreneurship environment (Grudzewski, Hejduk, 2006, p. 11).

Entrepreneurship can also be defined as a trait of character, or a set of traits that are characteristic for entrepreneurs. This concept is related to the business. This term is legal, as defined in the Act of April 26, 1964. Article 55 defines an undertaking as follows: "An enterprise is called an organized set of intangible and material components designed for business activity" (Civil Code, 1964, article 55). An organizational entity that is an enterprise may carry out both production and commercial or service activities. The purpose of an enterprise is to make a profit from its business.

The company includes in particular:

- the name of the company,
- the ownership of movable or immovable property belonging to the enterprise, including goods, devices, articles and other property rights in movable or immovable property,
- the rights arising from the leasing or letting of immovable or movable property and the right to use immovable or movable property arising from other legal relationships,
- receivables, cash and securities laws,
- permits, concessions, licenses,
- patents and other industrial property rights,
- related property rights and original property rights,
- business secrets,
- documents and books related to running a business activity (Civil Code, 1964, article 55).

Businesses are the creations of civilization processes that have taken the form of economic organizations today. Their origin is due to the processes of development of economic, political, legal and social relations. The forms of enterprises vary widely and are constantly subject to changes that result from changes in their environment. Both the establishment of the company and its development are connected with the development of civilization, which consists of three stages:

- an agrarian era,
- an industrial age,
- information age (Bialasiewicz, Marek, 2008, p. 26).

Literature of the subject lists several factors that shaped the present image of the company. They also affect the future. These are:

- the formation of joint-stock companies, i.e. corporations,
- changes in the territorial scope of the activity, e.g. from a local company to a global one,
- the change that has taken place over the years in the company - state relationship,
- changes in organizations management structures and systems,
- changes in companies' economics,
- changes in the company-environment relationship.

In the early period of the formation of enterprises the most popular form were the enterprises of the individual owner. In the 1980s, during the Second Industrial Revolution, which resulted in an increase in technical progress, there was a growing demand for capital, which could not be provided by individual entrepreneurs. The guarantee of such collateral was proposed by joint stock companies, which dynamically began to develop in the late nineteenth century. Transformation of companies into partnerships was an innovation in their development. The innovativeness of these partnerships in relation to individual enterprises enabled them (Bialasiewicz, Marek, 2008, p. 27):

- trading in shares contributing to the expansion of the capital market,
- collection of distributed savings for production or service purposes,
- reducing the risk of economic activity,
- increasing production scale as a result of capital accumulation.

Companies can adopt different organizational forms that fit their business area, needs, and operating conditions. It can be a simple form that includes one workplace where there is a single management structure or a complex one, where a multilevel management structure that is composed of different

organizational units is distinguished. All this creates an organizational whole and is called the enterprise.

1.1 Classification of enterprises

The classification of companies depends on different criteria. The types of these criteria are very diverse and can result, for example, from the geographic area of activity, size, type of activity, organizational and legal forms or concentration level. In the case of a business profile criterion, this is already measurable as more and more companies are involved in the production of different products or services.

Companies can be divided considering:

- type of activity (Białasiewicz, Marek, 2008, p. 55):
 - manufacturing companies, that deal with the production of material goods, including industrial, construction and agricultural enterprises,
 - service companies which purpose is to provide services such as financial, health, tourism, catering, or forwarding services,
 - trade businesses that deal both in retail and wholesale trade.
- business ownership:
 - private, these are private companies, civil partnerships or cooperatives,
 - public, i.e. those owned by the State Treasury, mixed ownerships or local self-government (Lichtarski, 2009, p. 26).

Companies are also qualified in relation to economic law:

- taking into account the functional approach - the company conducts its business for profit;
- bearing in mind the subjective concept - the law treats the enterprise as a body of rights and obligations arising from its business profile, both on its own responsibility and on its own account and its risks. The company's operations are carried out in a sustainable way (Lichtarski, 2009, p. 32).

One of the most important criteria for the division of enterprises is the size of the enterprise. Due to this classification we can distinguish:

- micro-enterprises,
- small businesses,
- medium enterprises,
- large companies.

The division by size is most often related to the economic policy of the state that is protected but also supports micro, small and medium-sized enterprises. The mentioned types of companies contribute to the so called "SME sector".

Small and medium-sized enterprises can be defined both through qualitative and quantitative criteria. "The qualitative criterion describes the state or location of the company in the particular industry. The most common quality features are:

- company structure,
- the role of the owner,
- the type of financing,
- legal independence" (Targalski, 2014, p. 49).

Management structure plays an important role in the qualitative criterion. As P. Drucker writes, "the company is as large as the managerial structure it requires" (Drucker, 2008, p. 252). The organizational structure consists of only one decision center. It is worth noting that both small and medium-sized enterprises are characterized by the role of the owner, who is a key factor in their structure. They take both the role of manager and entrepreneur.

The characteristic feature of small and medium enterprises is also the specific way of financing, as well as the use of own

capital. These companies make little use of loans or credits. "This feature plays an important role especially in the early stages of establishment, apart from finances, legal independence is also characteristic of small and medium enterprises" (Targalski, 2014, p. 50). These companies are also distinguished by the fact that they are mostly autonomous and independent. Literature of the subject, among qualities, also mentions the innovativeness of small and medium enterprises. Quality features include also small market share, small number and types of markets and customers dependency, local outlets, dependency on one or a few products, dependence on local resource markets, lack of sufficient resources to carry out extensive environmental research including market research, the importance of institutional local environment, clarity of ownership and direct management, unity of owner and control, simple organizational structure (Bednarczyk, 1998, p. 73).

Among the quantitative criteria used to determine the size of small and medium enterprises, absolute measures of size are used most often (Lichtarski, 2009, p. 27):

- employment level
- enterprise's turnover value, i.e. annual sales volume,
- total balance sheet,
- value of permanent property,
- annual net income,
- period of unit's business activity.

These are not the only size measures describing small and medium enterprises. At times, you can also use the size measures concerning a particular company's share in sales on a specific market. It should also be mentioned that the quantitative characteristics of SMEs are far more objective to define and much simpler to grasp considering the needs of the state and economic administration. "Quantitative criteria are used in the formal definition of the sector of small and medium-sized enterprises for various fields such as statistics, accounting, public aid. The reason for this is their measurability, as opposed to qualitative criteria" (Wolański, 2013, p. 21).

1.2 Presentation of the SME sector

The sector of small and medium-sized enterprises, so called the SME sector is a mix of both private and public sector, which consists of small, medium and micro enterprises. The term "small and medium enterprises" is used in the international business arena. It is used not only by the European Union countries but also by the World Bank, the United Nations and the World Trade Organization.

In the 1970s, in the United States, and later in Europe, the advantages of small and medium entrepreneurship were recognized. It was noted that the SME sector plays a large role in the economic development of the states. The United States has noted that the SME sector is the basis of the economy, while the Japanese have identified in this sector the element of very strongly developed corporate structure that supports the large industry (Piasecki, 1999, p. 103).

In Poland, the sector of small and medium-sized enterprises was discovered in the 1990s. "The government, in taking concrete steps to divert development and support those weaker market participants, implemented the following programmes: in 1995 Small and medium-sized enterprises in the economy, in 1999 Government activities towards small and medium enterprises up to 2002 and in 2002 First and foremost, entrepreneurship" (Wielgus, 2006, p. 128).

After the transformation period, Polish entrepreneurs gained access to various branches of the economy, which led to the development of private entrepreneurship sector. Because it was a period of dynamic growth of businesses, many small and medium-sized businesses emerged during this period. It was precisely thanks to the creation of the SME sector that the unemployment in Poland was limited, which allowed for the development of individual regions influencing the activation of

the whole economy. At present, the development of small and medium-sized enterprises is practically the only chance to increase employment and also effective competition (more: Marakova, Dyr, Wolak-Tuzimka, 2016, pp. 92-94) of the Polish economy on the international stage.

2 SME Sector - Empirical Approach

In order to emphasize the particular role that is played by the SME sector in the Polish economy, it was decided to examine the basic indicators describing this sector. Firstly, the number and structure of units belonging to the SME sector in 2015 is discussed. Essential statistical data is given in Table 1.

Table 1: Number and structure of entities from the SME sector in Poland in 2015

	The size of the SME sector in 2015					
	micro	small	medium	Micro structure	Small structure	Medium structure
PL	1838365	56713	15631	96%	2.96%	0.80%
1	116362	3761	972	6.30%	6.60%	6.20%
2	332734	8529	2734	18.10%	15%	17.50%
3	170343	5611	1358	9.30%	9.90%	8.70%
4	207408	7847	1939	11.30%	13.80%	12.40%
5	76937	2409	562	4.20%	4.20%	3.60%
6	72915	2885	742	4.00%	5.10%	4.70%
7	44549	1358	353	2.40%	2.40%	2.30%
8	46832	1536	369	2.50%	2.70%	2.40%
9	45383	1396	396	2.50%	2.50%	2.50%
10	188298	5819	1763	10.20%	10.30%	11.30%
11	92319	2309	602	5.00%	4.10%	3.90%
12	147231	3959	1160	8.00%	7.00%	7.40%
13	37446	1355	335	2.00%	2.40%	2.10%
14	86969	2789	853	4.70%	4.90%	5.50%
15	120138	3503	1022	6.50%	6.20%	6.50%
16	52499	1647	471	2.90%	2.90%	3.00%

Legend: 1 Lodz Province, 2 Masovia, 3 Lesser Poland, 4 Silesia, 5 Lublin Province, 6 Subcarpathian, 7 Podlasie, 8 Holly Cross, 9 Lubusz Province, 10 Greater Poland, 11 West Pomeranian, 12 Lower Silesia, 13 Opole Province, 14 Kuyavian-Pomeranian, 15 Pomeranian, 16 Warmia-Masurian.

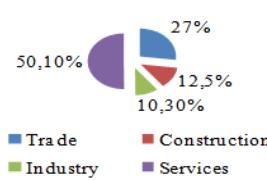
Source: (Local Data Bank, 15.04.2017); own calculations.

In 2015, 1.91 million entities qualified for the SME sector in the Polish economy accounted for 99.76% of all active enterprises. The structure of enterprises has remained unchanged for many years: micro-enterprises are dominant in the number of enterprises - 1.83 million, which constitutes 96%, then small 2.96% and the average of about 0.8% of the total.

Analyzing sixteen Polish voivodships it should be noted that the largest number of enterprises were located in the following provinces: Masovia (micro 18.1%, small 15%, medium 17.5%), Silesia (micro 11.3%, small 13.8% and medium 12.4%), Greater Poland (micro 10.2%, small 10.3% and medium 11.3%). However, in such voivodships as Opole, Podlasie, Holly Cross and Lubusz Province, the situation in terms of businesses size looked diametrically different. In these voivodships the structure of microenterprises did not exceed 2.5%, small 2.7%, and medium ones did not again exceed 2.5%.

After presenting the number of micro, small and medium enterprises, it is also appropriate to discuss the structure of SMEs according to the basic business area. The following pie chart shows the distribution that is under discussion.

Chart 1: Structure of SMEs in Poland by basic business area in 2014



Source: (PARP, 2016, p. 32).

In 2014, more than half of Polish small and medium-sized enterprises operated in the service sector (50.1%). 27.0% of

enterprises in the SME sector were active in the trade and 12.5% in the construction industry. Industry is the main business area for 10.3% of small and medium enterprises operating in the Polish economy.

Micro, small and medium enterprises are the main employer in the Polish economic arena. This is evidenced by the fact that in 2014 the SME sector was the workplace for over 6.3 million people - Tab. 2.

Table 2: Number of employees in the SME sector in the years 2010-2014 in Poland

	2010	2011	2012	2013	2014
micro	3399096	3508557	3459475	3371459	3495101
small	1143458	1181565	1203959	1218130	1223036
medium	1649103	1646415	1602448	1592360	1608324
SME Sector	6191657	6336537	6265882	6181949	6326461

Source: (PARP 2016, p. 145).

The number of people working in the SME sector is positively correlated with their size. So bearing in mind that the micro-enterprises are by far the most active, the largest number of people work there, over 3.4 million. Second place in this respect was medium-sized entities with the number of working people - 1.6 million, and at the end small enterprises - 1.2 million employees.

A slightly different situation occurred with the average monthly salary per employee - Tab. 3. Undoubtedly, it can be stated that the level of remuneration depends on the size of the economic entity, and precisely the larger the enterprise the higher the level of remuneration that is offered in it.

Table 3: Average monthly salary per one employee in the SME sector in the years 2010-2014 (in PLN)

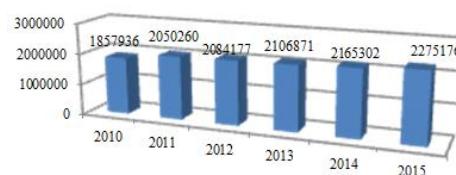
	2010	2011	2012	2013	2014
micro	2006	2059	2172	2210	2315
small	2472	2583	2704	2799	2873
medium	3363	3568	3706	3850	4015

Source: (PARP, 2016, p. 145).

The average monthly salary in 2014 in medium enterprises was over PLN 4 thousand. The ceiling PLN 3 thousand was not able to get in small entities, because the average salary was the equivalent of PLN 2873 there. At the same time, employees employed in micro-enterprises got the least - PLN 2315.

Certainly, the indicator that perfectly describes the financial condition of enterprises is the value of earned revenues. So their value at the turn of 2010-2015 is shown in chart 2 below.

Chart 2: Value of revenues in the SME sector in 2010-2015 [PLN mln]



Source: (Bank for Local Data, April 15, 2017).

In 2015, companies from the SME sector increased their revenues and recorded the highest value of over PLN 2.2 trillion. This also resulted in record growth dynamics, as in 2010 these revenues amounted to more than PLN 1.8 trillion.

After presenting the level of revenues, it is also worthwhile to analyze in detail the value of incurred costs in the SME sector. The collected statistical data are shown in Table 4. In addition, an analysis is completed with calculations of basic statistical measures.

Table 4: Value of costs in the SME sector in 2010-2015 [PLN million]

	Costs of the SME sector					
	2010	2011	2012	2013	2014	2015
PL	1687878	1904113	1934277	1941140	1982793	2070354
1	91 010	98 904	102 829	102 978	108 133	109 061
2	437 214	502 789	505 676	502 807	520 781	546 614
3	138 852	159 312	160 836	162 771	165 437	175 550
4	209 672	238 032	236 788	235 219	231 880	239 977
5	53 775	66 874	65 895	66 630	70 568	69 967
6	57 765	65 286	64 348	69 398	71 146	69 987
7	35 757	39 995	41 461	40 896	42 856	44 826
8	38 246	40 729	40 329	39 420	40 100	40 562
9	33 601	36 675	37 417	37 563	37 340	41 145
10	177 383	188 724	197 751	209 243	212 004	216 491
11	61 023	67 775	70 948	66 776	68 876	79 200
12	108 036	121 525	128 103	131 299	128 627	139 436
13	33 517	37 129	38 321	37 778	37 437	37 926
14	72 453	80 733	88 671	81 622	87 311	89 200
15	103 024	118 467	113 051	116 240	119 038	126 123
16	36 549	41 213	41 854	40 797	41 257	44 287
						40 993
						21 20%

Legend: 1 Lodz Province, 2 Masovia, 3 Lesser Poland, 4 Silesia, 5 Lublin Province, 6 Subcarpathia, 7 Podlasie, 8 Holly Cross, 9 Lubusz Province, 10 Greater Poland, 11 West Pomeranian, 12 Lower Silesia, 13 Opole Province, 14 Kuyavian-Pomeranian, 15 Pomeranian, 16 Warmia-Masurian.

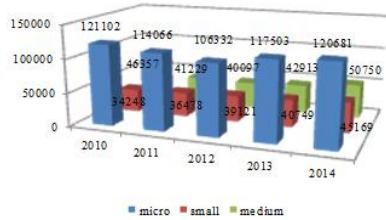
Source: [Local Data Bank, 15.04.2017]; own calculations.

The analysis of the presented statistics undoubtedly shows that the costs of the SME sector systematically increase. For the first year of audit, i.e. 2010, they amounted to PLN 1.6 trillion and already in 2015 over PLN 2 trillion, indicating a growth rate of 22.7%. On the other hand, the average value of costs over the studied years was PLN 1.9 trillion.

The highest value of costs incurred by enterprises was described by three voivodships: Mazovia over 546 billion, Silesia 239 billion and Greater Poland 216 billion. The lowest costs were characterized by: Holly Cross Voivodeship 39 bln, Lubusz Province 37 bln and Opole Province 37 bln. It is worth mentioning that the regional ranking in the case of costs turned out to be analogous to the situation of the revenues achieved by the companies.

As regards the financial condition of the SME sector, the next step was to discuss the amount of profits according to the size of the entities, as shown in Chart 3. It is easy to see that gross profit was definitely highest among micro-enterprises (it is directly related to their numbers). In the last audited period, i.e. in 2014 it amounted to over PLN 120 billion and thus was more than double the profit achieved by both small and medium-sized businesses.

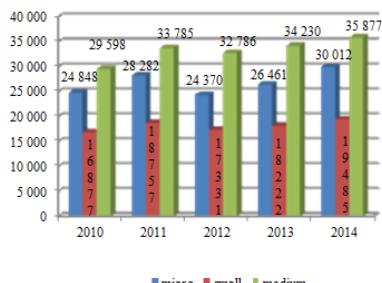
Chart 3: Gross profit of the SME sector by size [in million PLN]



Source: own elaboration on the basis of: (PARP, 2016, p.147).

The situation of enterprises also provides another indicator, namely the amount of total investment outlays. The value of incurred capital expenditures in entities belonging to the SME sector in the years 2010-2014 is presented in the following chart 4.

Chart 4: Total investment expenditure in 2010-2014 [PLN mln]



Source: own elaboration based on: [PARP, 2016, p. 148].

Investment expenditures were dependent on the size of the companies, but slightly different from the size of the wages. Because in this case, the lowest level of investment was characterized by small enterprises (in the amount of less than PLN 19.5 billion in 2014), followed by micro-enterprises with a value of over PLN 30 billion, and finally the highest level of capital expenditures was characterized by medium enterprises, as the amount of over PLN 35 billion was spent on this type of investment, which primarily can be attributed to the potential of such economic entities.

3 Summary and Conclusions

The small and medium businesses sector is the backbone of any economy. Their strength manifests itself mainly in the role they play in the labor market. Entities from the SME sector also have a significant influence on the emergence and development of the economy's innovation.

Undoubtedly, in Poland, the SME sector plays a significant role in the functioning of the economy, this fact is confirmed, among others, by the following statistics:

- in 2015 there were 1.91 million entities qualified for the SME sector, and the sector accounted for 99.8% of all enterprises; most of the companies were located in the Mazovia, Silesia and Greater Poland Provinces, whereas in Opole Province, Podlasie Province, Holly Cross and Lubusz Province the lowest number of enterprises was recorded;
- SMEs in 2014 most frequently engaged in service activities (50.1%), often also commercial (27.0%) and significantly less often construction industry (12.5%) and industrial (10.3%);
- the size of the labor market in Poland is determined by small and medium-sized enterprises. In 2014 the number of employed persons in the SME sector amounted to 6.33 million people;
- the average remuneration per one employee in the medium enterprise in 2014 was PLN 4015, people in small and micro enterprises earned significantly less;
- the revenues of small and medium-sized enterprises in the analyzed 2015 amounted to PLN 2.2 trillion and thus achieved a record high;
- the costs of the SME sector were increasing systematically and in the last studied year they reached the level of PLN 2 trillion;
- the highest gross profit was achieved by micro-enterprises (PLN 120 billion), while small and medium-sized entities generated at least half that results;
- investment expenditures were based on the size of enterprises, the highest level was recorded in medium-sized entities (over PLN 35 billion), then in micro enterprises, and the lowest level was in small enterprises.

Literature:

1. Bank of Local Data, <http://bdl.stat.gov.pl> [access 15.04.2017].
2. Bednarczyk, M.: *Otoczenie i przedsiębiorczość w zarządzaniu strategicznym organizacją gospodarczą*. Cracow: WAE, 1998. p. 73.
3. Bialasiewicz, M., Marek, S. (ed.): *Podstawy nauki o organizacji, przedsiębiorstwo jako organizacja gospodarcza*. Warsaw: PWE, 2008. p. 26. ISBN 978-83-208-1737-9.
4. Drucker, P.: *Praktyka zarządzania*. Warsaw: MT Biznes, 2008. p. 252. ISBN 978-83-61040-25-5.
5. Grudzinski, W., Hejduk, K.: *Współczesne problemy zarządzania*, Katowice: PARA, 2006. p. 11.
6. Licharski, J.: *Podstawy nauki o przedsiębiorstwie*. Wroclaw: WAE, 2009. p. 26. ISBN 978-83-7011-870-9.
7. Marakova, V., Dyr, T. Wolak-Tuzimek, A.: *Factors of Tourism's Competitiveness in the European Union Countries*, "Ekonomika a management" 2016, XIX, 3. pp. 92-94. DOI: 10.15240/tul/001/2016-3-007.
8. PARP: *Raport o stanie sektora MSP w Polsce*. Warsaw: Polska Agencja Rozwoju Przedsiębiorczości, 2016. pp. 32, 145, 147-148. ISBN 978-83-7633-311-3.

9. Piasecki, B.: *Ekonomika i zarządzanie małymi firmami*. Warsaw: PWN, 1999, p. 103. ISBN 83-01-12622-1.
10. Targalski, J.: *Przedsiębiorczość i zarządzanie małym i średnim przedsiębiorstwem*. Warsaw: Difin, 2014. pp. 21-22, 50. ISBN 978-83-7641-935-0.
11. The Statement of April 23, 1964 *Kodeks cywilny*. Journal of Laws 1964 No. 16 pos. 93, art. 55.
12. Wielgus, G.: *Rozwój sektora małych i średnich przedsiębiorstw w Polsce*. Cracow: GUS, 2006. p. 128.
13. Wolański, R.: *Wpływ otoczenia finansowego na konkurencyjność małych i średnich przedsiębiorstw*. Warsaw: Wolters Kluwer, 2013. p. 21. ISBN 978-83-264-6027-2.

Primary Paper Section: A

Secondary Paper Section: AH, BB, AE