

## PROFITABILITY ANALYSIS OF SME SECTOR IN POLAND

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### **Хиз А., Гікас Г. Аналіз прибутковості сектору малих і середніх підприємств у Польщі**

*У статті проаналізовано прибутковість сектору малих і середніх підприємств (МСП) у Польщі. Представлено методологію, застосовану в ході проведення дослідження. Проаналізовано розвиток сектору МСП у Польщі. Дано оцінку фінансових кондицій польських компаній сектору МСП у 2009-2011 рр. Обґрунтовано майбутні можливості та загрози розвитку сектору МСП в умовах економічної кризи.*

**Ключові слова:** *мали і середні підприємства, прибутковість, Польща.*

### **Hyz A., Gikas G. Profitability analysis of SME sector in Poland**

*The profitability of small and medium enterprises (SME) sector in Poland is analyzed. The methodology used in the investigation is presented. The development of SME sector in Poland is analyzed. Financial conditions of Polish SME-sector companies evaluation in years 2009-2011 is done. Some future opportunities and threats for SME sector in times of economic crisis are substantiated.*

**Key words:** *small and medium enterprises, profitability, Poland.*

### **Хыз А., Гикас Г. Анализ прибыльности малых и средних предприятий в Польше**

*В статье проанализирована прибыльность малых и средних предприятий (МСП) в Польше. Представлена методология, использованная в ходе проведенного исследования. Проанализировано развитие сектора МСП в Польше. Дана оценка финансовых кондиций польских компаний сектора МСП в 2009–2011 гг. Обоснованы будущие возможности и угрозы развития сектора МСП в условиях экономического кризиса.*

**Ключевые слова:** *малые и средние предприятия, прибыльность, Польша.*

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**I**ntroduction. The purpose of this study is to analyze the situation of Polish non-financial corporate sector during the years of economic crisis. The information presented below is based on the statistical data on revenues, costs and financial results concerning business activity from 2009 till 2011. Undoubtedly, the situation of the company can be shown by the size of revenues, and mainly, their relation to cost, and thus generating a profit. Moreover, the condition of the economic entities can be also assessed on the basis of various groups of indicators informing, for example, about achieved profitability.

**Methodological Notes.** This research concerns statistical units classified – according to the definition of official Polish statistics (GUS) – to non-financial corporate sector. According to data of Central Statistical Office, non-financial entities are all entities of the economy according to the NACE classification (NACE 2007) ex-

cept: natural persons engaged in individual agricultural holding, banks, cooperative credit unions, insurance companies, brokerage houses, investment companies and funds, and national investment funds, companies and pension funds, higher education, independent public health care, cultural institutions with a legal personality and with the exception of the entire section O, which is: public administration and defense, compulsory social security; section T, such as private households with employed employees, households producing goods and services for their own needs and section U (extraterritorial organizations and bodies). Highlighted in the analysis are small enterprises (10-49 employees, periodization semi-annual) and medium (50-249 employees, periodization quarterly).

In this research have been distinguished, in terms of the type of business, three groups of companies: manufacturing, trade and services. Analyzed results were calculated on amounts

aggregated for a set of non-financial companies employing more than 10 people<sup>1</sup> (47 581 total entities at the end of the second quarter of 2011, including 30,314 small, 14,157 medium and 3,110 large, and in the third quarter of 2011, recorded 14,299 medium entities and 3,117 of large sized).

**SME sector development in Poland.** After disintegration of centrally planned economies East European countries ended up with an over industrialized system, with a predominance of a state sector employment, over-extensive social welfare, deep penetration of central planning, and in many cases, macroeconomic instability (McIntyre, Dallago, 2003; OECD, 1996; Nuti, 1982). From the ownership's point of view, Polish economy was divided into three sectors: state, cooperative and private. The existence of three sectors was not equivalent to the fact that all of them are equal concerning their economic potential: assets, turnover and employment. In general, the state and cooperative sector predominated over the private one. On the other hand private farms remained the dominant form of agriculture in Poland covering approximately 70% of the total areas of farms. In state sector predominated big enterprises employing over 200 people. Approximately 20 per cent of employees in 1989 worked in enterprises employing more than 5000 people and 60 per cent in those having more than 1000 employees. A more favorable situation was in the cooperative sector – about 85 per cent of employees worked in enterprises having 50-500 employees, although it should be taken into consideration that state industrial enterprises employed approximately seven times more people than the cooperative ones (Hyz, Gikas, 1995). The relation was similar in the case of state and private sectors. This partly resulted from the law, obligatory till the end of 1988 that private enterprises could employ at the maximum 50 persons. The only exception was foreign enterprises (Polish-foreign joint venture), which could employ up to 100 people. These limitations have been abolished since 23<sup>rd</sup> December 1988 (OECD, 1997; OECD, 1999; USAID, 1995). In 1988 was established the Act on Business Activity and there was no other document influencing the development of this sector. The document was not directly focusing on the SMEs, however it permitted entrepreneurs to start their action without

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<sup>1</sup> Refers to the analysis of the financial situation of enterprises in 2011

any governmental obstacles. That was the beginning of so called entrepreneurship explosion in the beginning of the 90s (Gemini, 1999). First document that was clearly defining as government strategy towards SMEs sector was published in 1999 and was entitled: Government Policy towards Small and Medium size Enterprises until 2002 (Jorgensen, Gelb, Singh, 1990).

In 2002 Polish SME represented 99,8% of all active enterprises and provides for almost 7 million jobs. Comparing statistical data (number of companies per ten thousand inhabitants) in Polish economy and European Union of 15 members we can observe that in 2003 there were 4,6 companies with 50-249 employees in EU (3,2 in Poland), 31,7 companies 10-49 employees in EU (6,7 in Poland) and 451 companies 1-9 employees (435 in Poland).

According to the latest GUS data<sup>2</sup>, at the end of 2009, economic activity in Poland conducted 1,674 million of non-financial companies. SMEs are the main strength of the Polish economy and as in previous years (2008), companies from the SME sector constituted vast majority – 98,9% of all active enterprises<sup>3</sup>.

Among them, the largest group constituted micro enterprises (employing up to 9 people), which represent 95,9% of the total population. Small companies, employing more than 9 persons constituted 3% of the total, medium – sized companies – 0,9%, and large – 0,2%. It should be noted that the structure of enterprises in Poland is very close to the entire population of companies in the European Union.

The vast majority of enterprises in the EU are micro, small and medium enterprises (99,8%). The same situation is in Poland, where among the 1,67 million companies, the SME entities constitute the vast majority (99,8%), while in Poland SME sector in a greater extent

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<sup>2</sup> Source: “The activity of non-financial enterprises in 2009”, CSO. Data do not include units which are classified in section A (agriculture, forestry, hunting and fishing), K (financial, insurance), O (public administration and defense, compulsory social security). Note the considerable difference in the number of firms compared to the number registered in the Company, where there are about 3,7 million. The author assume the number of CSO report, because it is estimated that at least half of the enterprises existing in the Company actually is not established. See “Analysis of regional variation in investment activity of the SME sector with particular emphasis on innovation”, “Analyses and Forecasting Department of the Ministry of Economy”, 2010.

<sup>3</sup> Source: “The activity of non-financial enterprises in 2009”, Central Statistical Office (GUS)

than in the EU is dominated by micro companies, whose share in the total number of enterprises (96%) exceeds the EU average (91,8%). The share of small firms in the number of SMEs in Poland (2,8%) is about more than half, less than the average for the EU-27 (6,9%)<sup>4</sup>.

Looking at the long-term trends, the number of SMEs is steadily growing (according to Eurostat data, in 2003-2009 the number of SMEs in Poland increased by 7,4%), but this growth is significantly lower than in EU-27 (11,6%). In 2009, there was a strong decline in the number of firms in the EU – by 6,4%, and to a lesser extent, in Poland – by 5,6% (to 1,67 million from 1,79 million in 2008). This strong reduction in the number of SMEs in Poland and across the EU (about 115 thousand) was caused by the financial crisis the world economy<sup>5</sup>.

**The financial condition of Polish companies in years 2009–2011.** *The financial situation of enterprises in 2009–2010.* The financial situation of Polish enterprises in terms of size was shaping differently. The small and large enterprises has increased their revenues from total activity, respectively, by 7,9% and 8,5%. Dynamics of revenues was higher than the dynamics of its costs, which resulted in growth due to economic activity (in both cases by about 20%). In both groups of these companies, have also increased sales revenue; in small entities more slowly than the costs and in large entities more rapidly than costs. Both, in small and large entities was reported increase in gross and net results, approximately 20%. The improvement positively influenced all types of enterprises activity. There was an increase of profitability at all levels (with the exception of profitability on sales in small entities, where was reported a decrease).

In medium entities the revenues were decreased by 1,5%. The costs have fallen in a slower pace. Financial result on economic activity decreased by 3,5%. Sales revenue declined by 1,1% and costs by 0,9%. Result from sales decreased by 6,3%. Deteriorated has been also a positive result on other operating activities (by 12,0%). Only on the financial activity was registered improvement (reduction in losses).

Return on sales in the sector of small enterprises has decreased slightly in 2010 compared to the previous year to 4,7 from 4,9. At the same

time there was an increase compared to the previous year the indicators of gross and net profitability. Gross profitability ratio increased from 5,0 to 5,6, while the net from 4,2 to 4,7.

Medium-sized enterprises recorded a slight decrease in profitability in all indicators, the largest in return on sales, which declining from 4,2 in 2009 to 4,0 in 2010. Gross and net profitability also decreased compared to the previous year. Growth trends visible in small enterprises based on a higher rate of return on sales prove a better activity and efficiency of this sector in relation to medium-sized enterprises in 2010.

*The financial situation of enterprises in 2011.* In the first half of 2011 for all groups of activity of small entities, the pace of change of values in the index of overall financial situation<sup>6</sup>, in terms of semi-annual periodization (h/h) and annual periodization (y/y) was positive (WOSF increased). In the medium entities in the third quarter of 2011 only for manufacturing companies, the pace of change of values in the WOSF index, received negative values both q/q (quarterly), and y/y (in annual terms)<sup>7</sup>.

<sup>4</sup> Source: Raport o stanie sektora małych średnich przedsiębiorstw w Polsce, PARP, 2011.

<sup>5</sup> Source: Raport o stanie sektora małych średnich przedsiębiorstw w Polsce, PARP, 2011.

<sup>6</sup> Index of overall financial situation (WOSF) – a relation to index of capital structure (equity capital relative to liabilities) and index of structure of assets (fixed assets relative to current assets) or the ratio of use of capital (equity capital relative to assets) and ratio of use of liabilities.

<sup>7</sup> Source: Raport z oceny stopnia zagrożenia przedsiębiorstw upadłością – komponent mikroekonomiczny – Ra-port4, Małopolska Szkoła Administracji Publicznej Uniwersytetu Ekonomicznego w Krakowie, Kraków, marzec 2012 r.

Table 1

## Income, financial result and profitability (2009, 2010)

a - 2010	Revenues in mld zł		Financial result in mld zł					Profitability in %		
b - 2009	Total	Sale	from sale	on other operating activity	on financial activity	brutto	netto	from sale	brutto	netto
<b>TOTAL</b>	a 2.451,6	2.361,9	122,6	8,2	1,2	131,8	109,9	5,2	5,4	4,5
	b 2.322,6	2.223,9	114,9	6,3	-5,1	116,1	95,8	5,2	5,0	4,1
of which:										
- private sector	a 2.157,2	2.089,8	108,2	5,7	-4,3	109,4	91,2	5,2	5,1	4,2
	b 2.026,4	1.948,4	103,6	7,3	-8,5	102,4	85,4	5,3	5,1	4,2
- public sector	a 294,4	272,1	14,4	2,5	5,5	22,4	18,7	5,3	7,6	6,4
	b 296,2	275,5	11,3	-1,0	3,4	13,7	10,4	4,1	4,6	3,5
of which:										
- small companies	a 388,6	372,9	17,5	3,1	1,0	21,7	18,2	4,7	5,6	4,7
	b 360,3	345,1	16,8	2,5	-1,3	18,0	15,1	4,9	5,0	4,2
- medium-sized companies	a 652,2	630,6	25,1	4,4	-2,1	27,1	22,4	4,0	4,2	3,4
	b 662,0	637,8	26,8	5,0	-3,4	28,5	23,3	4,2	4,3	3,5
- large companies	a 1.410,8	1.358,4	80,0	0,7	2,3	83,0	69,3	5,9	5,9	4,9
	b 1.300,3	1.241,0	71,3	-1,2	-0,4	69,6	57,4	5,8	5,4	4,4

Source: Financial Statements F-01 from the database Insigos MG and calculations DAP MG.

For large entities the pace of change of values in the WOSF index, in the third quarter of 2011, both q/q, and y/y was positive (except for commercial entities q/q).

In small enterprises in the first half of 2011 index of overall financial situation (WOSF) in trade and production entities achieved values above 1,0. Compared to the previous period, which is the second half of 2010, in all groups of

small enterprises there was an increase of WOSF index – the largest in manufacturing entities plus 19,37%, the lowest in commercial entities plus 2,37%. In turn, compared to the same period of previous year, which is the first half of 2010 (y/y) the pace of change of values in the index of overall financial situation, was positive for all groups of entities – the highest values reported for trading companies plus 6,40%).

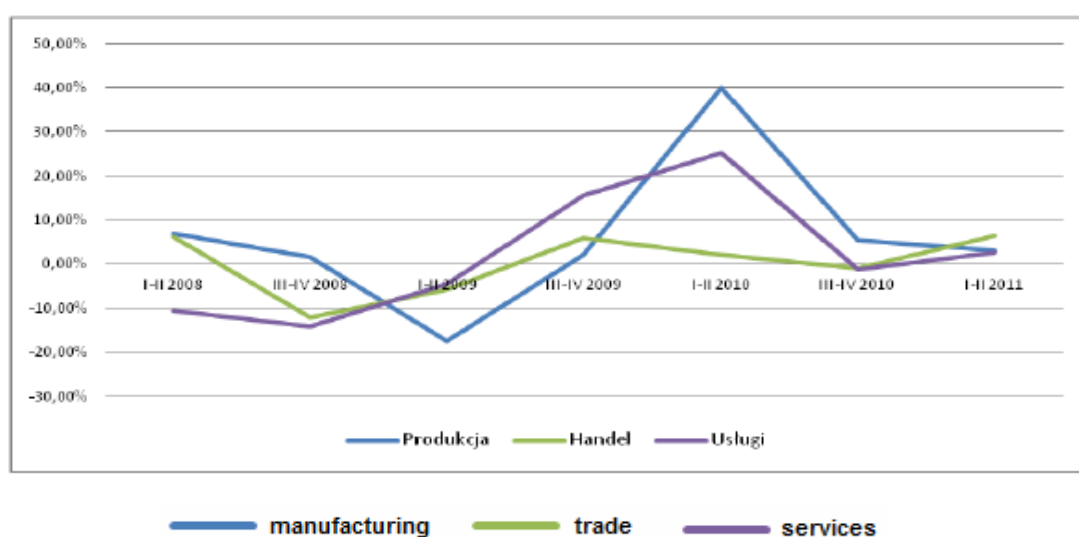
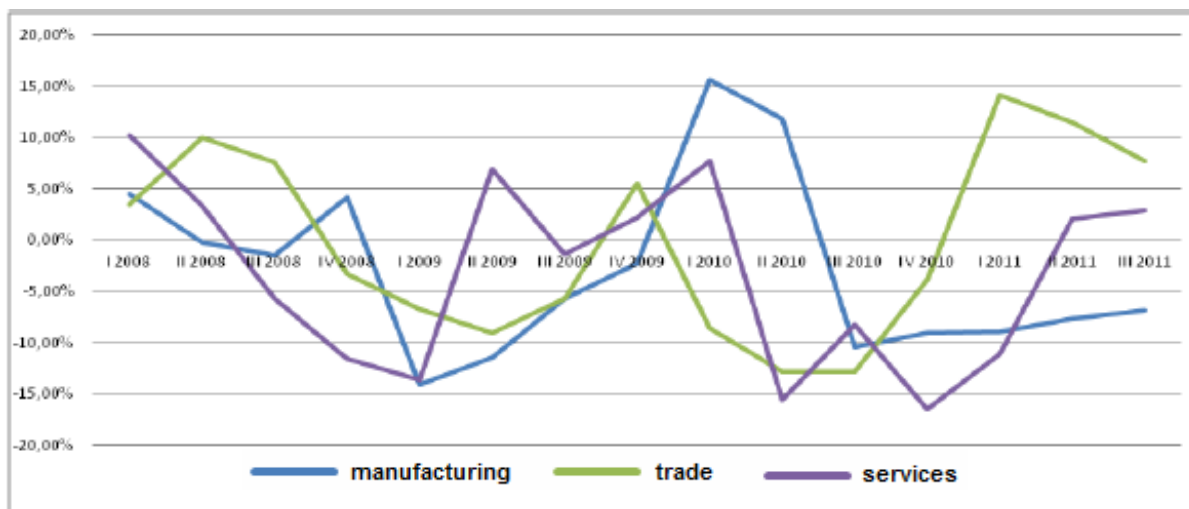


Figure 1. Index of overall financial situation of small enterprises by type of activity in Poland in the first half of 2007 till first half of 2011 (in%, y/y – annual periodization).

Source: Raport z oceny stopnia zagrożenia przedsiębiorstw upadłością – komponent mikroekonomiczny – Raport

In the medium – sized enterprises in the third quarter of 2011, WOSF only in trading entities achieved values above 1,0. In comparison to the second quarter of 2011 (q/q) positive pace of change of values in the WOSF index was characterized only by trading companies (plus 2,21%), while compared to the same period of

previous year, which is third quarter of 2010 (y/y) trading companies (plus 7,73%) and service companies (plus 2,90%). In medium sized manufacturing companies still occurs reduction in value of WOSF, both q/q (pace of change of values in the WOSF index – minus 12,80%), as well r/r (minus 6,84%).



**Figure 2. Index of overall financial situation of medium-sized enterprises by type of activity in Poland during the first quarter of 2007 – third quarter of 2011 (in%, y/y).**

Source: *Raport z oceny stopnia zagrożenia przedsiębiorstw upadłością – komponent mikroekonomiczny – Raport*

In the first half of 2011 operating margin sales (ROS<sup>8</sup>) and return on assets (ROA<sup>9</sup>) of small enterprises increased y/y (with the exception of ROS index of service companies). Compared to the second half of 2010 (h/h) values of ROS and ROA of all groups of small enterprises were lower – the largest decrease in profitability occurred in service entities. The annual(y/y) pace of change in the value of the profitability ratios for manufacturing companies was: ROS +33,07% and ROA +13,27%, for trading companies respectively: +5,03% and +10,82% and service companies: -9,82%, and +6,78%.

In comparison to the second half of 2010, the ROS and ROA value ratios of all groups of small enterprises were lower and the semi – an-

nual (h/h) pace of change in the value of the analyzing ratios for manufacturing companies was: ROS -1,34% and ROA -5,41%, for commercial companies respectively: -12,56% and -14,14% and service enterprises: ROS -16,72% and ROA -18,55% (biggest drop in profitability).

In the medium entities, in the third quarter of 2011, only service companies showed increasing in value of ROOS and ROA ratios, both for y/y (annual period), and q/q (quarterly). In case of manufacturing and trading entities, growth in ratio of operating profitability of sales and return on assets was recorded in comparison to second quarter of 2011.

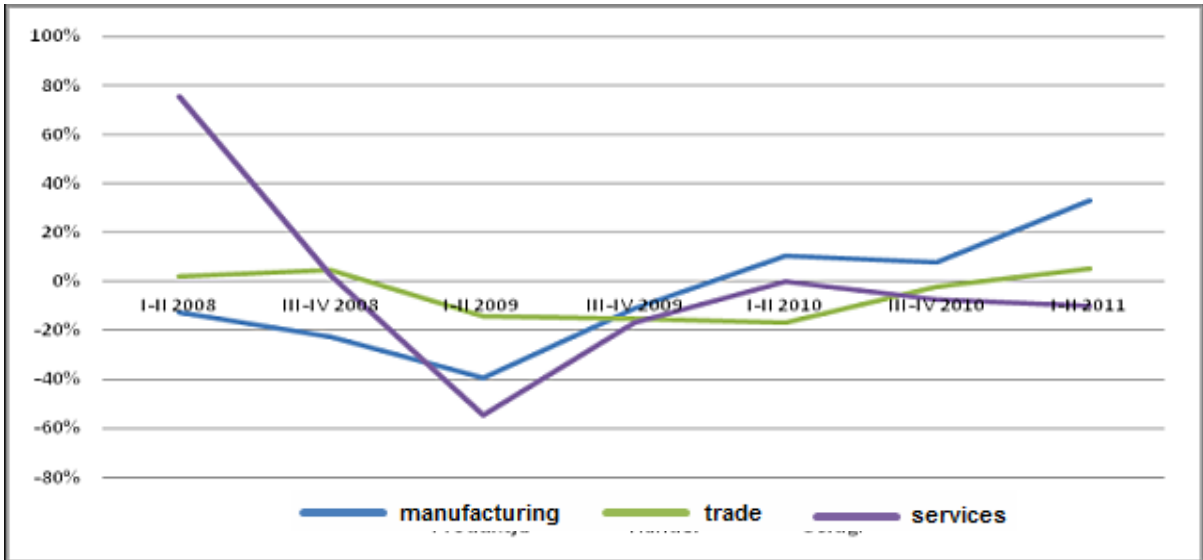
Operating profitability of sales (ROOS) and profitability of assets (ROA) of the medium enterprises in the third quarter of 2011 compared to third quarter of 2010 (y/y) refer to manufacturing and commercial companies was lower. Only the service entities showed in the third quarter of 2011 higher value in annual period (y/y) of ROOS and ROA indicators. The annual (y/y) pace of change in value of the profitability ratios for medium – sized manufacturing enterprises was: ROOS -5,33% and ROA -0,08%; for

<sup>8</sup> Ratio of operating profitability of sales: calculated including operating result. This ratio determines the rate of return on sales at the operational level, so no tax burden and without regard to financial costs associated with debt.

<sup>9</sup> The return on assets: percentage shows how profitable a company's assets are in generating revenue. Calculated by dividing a company's annual earnings by its total assets.

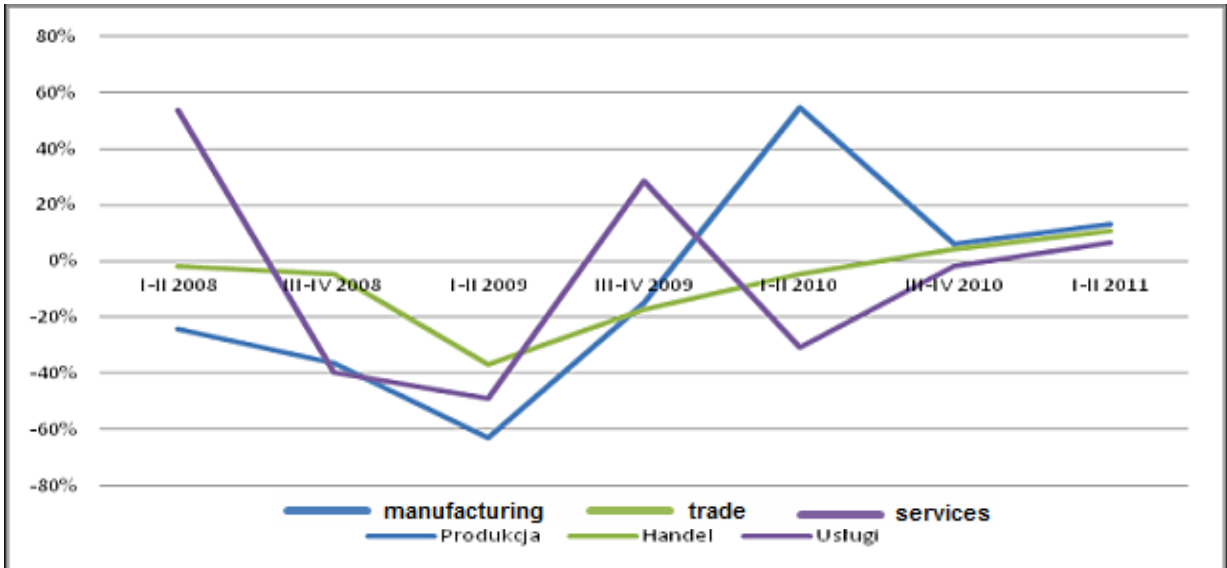
trading companies respectively: -9,23% and -5.17% and for service companies +8,46% and +20,92%. Compared to the second quarter of 2011 (q/q) all groups of medium – sized entities had higher profitability ratios. The quarterly pace

of changes in value of analyzed indicators for manufacturing companies was: ROOS +11,67% and ROA +2,51%; trading companies respectively: +9,26% and +1,20%; and for service companies respectively: +6,45% and +8,20%.



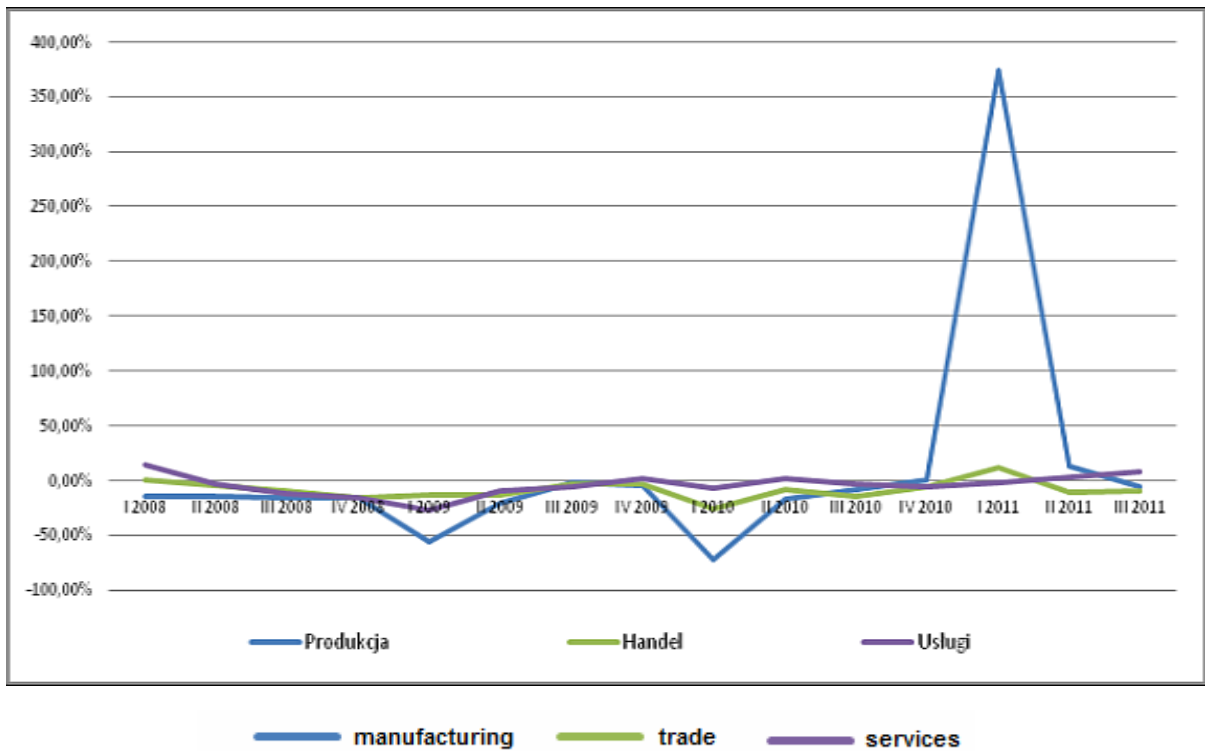
**Figure 3. ROOS pace of change of small entities by type of business activity in Poland during the first half of 2007 – first half of 2011 (in%, y/y).**

Source: Raport z oceny stopnia zagrożenia przedsiębiorstw upadłością – komponent mikroekonomiczny – Raport



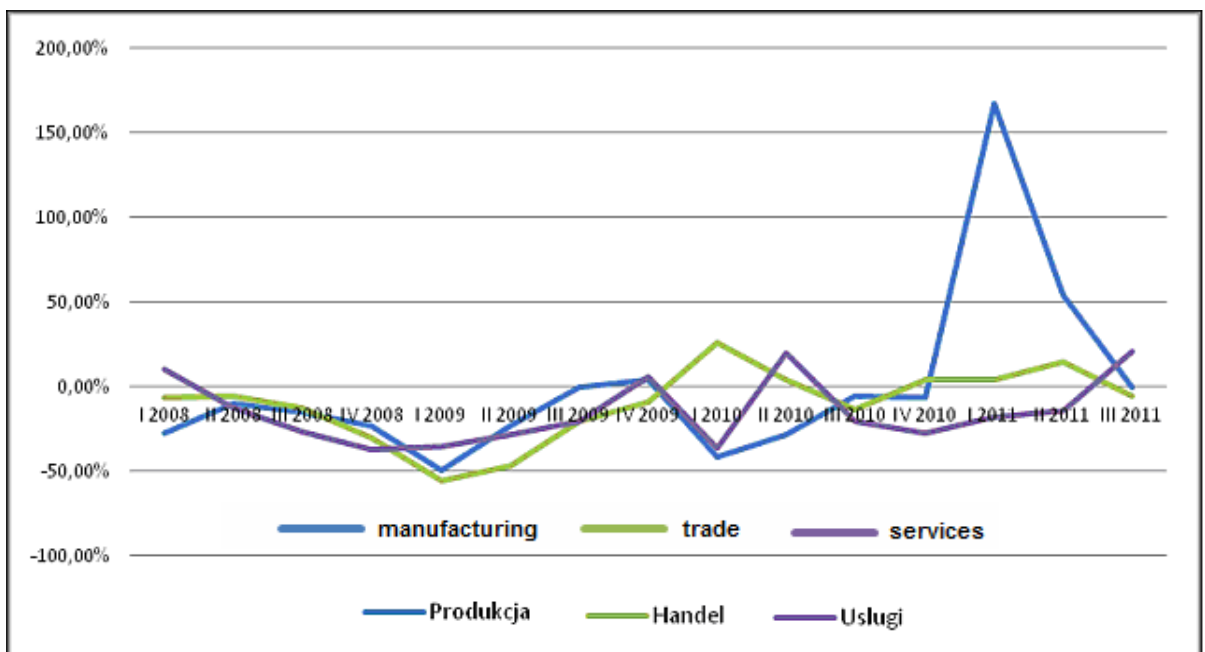
**Figure 4. ROA pace of change of small entities by type of business activity in Poland during the first half of 2007 – first half of 2011 (in%, y/y).**

Source: Raport z oceny stopnia zagrożenia przedsiębiorstw upadłością – komponent mikroekonomiczny – Raport



**Figure 5. ROS pace of change of medium – sized entities by type of business activity in Poland during the first quarter of 2007 – third quarter of 2011 (in%, y/y).**

Source: Raport z oceny stopnia zagrożenia przedsiębiorstw upadłością – komponent mikroekonomiczny – Raport



**Figure 6. ROA pace of change of medium – sized entities by type of business activity in Poland during the first quarter of 2007 – third quarter of 2011 (in%, y/y).**

Source: Raport z oceny stopnia zagrożenia przedsiębiorstw upadłością – komponent mikroekonomiczny – Raport

### **Barriers and development perspectives of SME sector in times of economic crisis.**

#### *Barriers to entrepreneurship development.*

A significant impact on the functioning of SME sector have the barriers, which the sector faces on its development. As the main barrier some sources indicate the limited access to finance, changes in demand on the local and regional market, tax burden and legal determinants<sup>10</sup>.

Compared with countries such as Ireland, Cyprus, Estonia, Latvia, Lithuania, Hungary, where the corporate income tax (CIT) rate is already lower than in Poland the current tax rate in Poland (19%) is no longer competitive. Lowering income tax rate for the economic activity is very important for the Polish enterprises, especially SMEs, because they are still financially weak, which limits their growth opportunities. Lack of transparency and clarity of indirect taxes (VAT and excise) and taxes on economic activity (CIT, PIT of economic activity) increases the risk of economic activity and incurs costs that unreasonably burden the activity, thus reducing competitiveness.

More than 10% of respondents as the most important barrier to business indicate the competition from large companies. The threats to business and development, owners of SME, can see in competition with privileged companies, whose position is built on access to public assistance. This applies mainly to public entities operating in special economic zones, remitting to certain establishments of taxes and social insurance contributions, granting public aid "to large companies of special importance for the economy" and the difficult access of small businesses to EU funds.

The bureaucracy barriers has indicated 4% of respondents. Only every hundred respondents pointed to lack of qualifications of the labor force as a barrier to development. This share has been declining steadily for the past several surveys and is now the lowest in the history. It is difficult to identify the cause of this situation – it may be a result of more and better match labor market for needs of the economy, may also result from the fact that only few companies are seeking for employees. Another explanation of this situation is the fact that entrepreneurs seeking employees can choose from a growing num-

ber of candidates. Also, only a small percentage of the respondents pointed to the cost of labor force as a potential problem.

Among other barriers entrepreneur also mention problems with obtaining funding for their activities and business development (both for obtaining loans from commercial banks, as well as the already mentioned difficulties in obtaining financing from EU funds), payment blockages that lead to liquidity problems and risk bankruptcy. Obstacle to the development of SMEs is also poorly developed infrastructure, and still unstable political situation.

#### *Prospects for development of SME sector.*

The economic crisis has forced companies to take new measures to maintain the current position in the market. From the perspective of companies, times of crisis besides the fact that they brought trouble finding buyers for their products, also gave impetus to carry out the reorganization of the company or expand its business by entering new markets or introduce new products. It is encouraging that in total companies, they are some, which its situation is stable enough that the crisis did not affect the deterioration of their performance, and indeed there have been some positive trends. Functioning of enterprises in market is associated with significant dynamics. It is exposed to the influence of many factors, which are characterized by volatility. Great importance has the direct environment of the company, its market in which is operating, customers, contractors, demand conditions. The success in the market is to identify business objectives, methods of their attainment and implementation for everyday use. The aspiration for development transformed into concrete action can give a guarantee of business success. Company specifying the target may in various ways to implement it.

One of the most important factors of development, which contributes to improving the competitiveness of the economy is an innovation. It is interpreted very widely, includes new technologies, new organizational structure, as well R & D activities, its verification, until the introduction of new and modified products services and technology to marketplace. In the past few years the investment in innovation has increased and the availability to finance changes were improved, which was the engine of development in Poland. Particular importance was an increase in private funding sources. By analyzing Polish position in the ranking of the level of

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<sup>10</sup> M. Kochmańska, Barriers to entrepreneurship of small and medium businesses, Scientific Papers of Humanitas University, [www.sbc.org.pl](http://www.sbc.org.pl)



innovation, clearly stands out from EU average, but it should be noted that Polish position was improved very quickly.

**Summary.** The attitudes of entrepreneurs in analyzed years, once more prove that reacting flexibly to the requirements of market are able to generate a good result, although there were also necessity to close down business. Companies that have accepted the challenge, survived – today are stronger and can specify the strategy for the future. The condition is to change in approach, based on short-term actions, in the direc-

tion of thinking in long-term categories. This follows from the fact that the perspective of the market environment in which Polish companies will operate in coming years, become substantially worse, which should lead them to reconsider investment plans and strategies. The crisis makes entrepreneurs more aware of the problem of uncertainty, unpredictability and volatility of market conditions. The positive is the fact that almost half of enterprises in the SME sector sees crisis as an good opportunity to search for new chance of development.

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