ISSN 2364-0790
Proceedings of the Symposium on Business and Economics in Times of Crisis Vol. 3 (2015)
Lupcon Center for Business Research

The Financial Situation of the Meat Enterprises in Poland in the Period of Economic Crisis

Elżbieta Jadwiga Szymańska (Warsaw University of Life Sciences, Poland)

Abstract. The main aim of the study was to evaluate the economic situation of the enterprises of the meat industry in a changing economic environment in Poland in 2008-2012. The source of data for the analysis were data of the Polish Main Statistical Office, General Veterinary Inspectorate and studies of the literature. The research have shown that during the global financial crisis in 2009 and 2010 there was economic growth in Poland. The majority of Polish enterprises has touched economic slowdown. Among examined meat companies the return on equity in the doubled between 2008 and 2010. Within the same period, the percentage of unprofitable companies was reduced from 21.8% to 13.1%. There was an improvement in the current financial liquidity from 1.04 to 1.17, with over 4-time increase in equity funds in trading. In analysed years, the value of own equity increased by ¼ and there was the reduction of long-term debt by over 29%. The reduction of investment outlays by over 43% constituted a certain threat to the development of business activity. In the following years the investment value is gradually increased. Presently, improving the financial situation of Polish meat enterprises requires more consolidation and properly chosen strategy of action adapted to the situation in this market.

Key words: financial crisis, meat companies, economic growth, profitability, financial liquidity.

Introduction

Progressing globalization and economic linkages in world have led to the fact that the economic crisis that began in 2008 in the US have moved to other countries. In Poland, due to various circumstances, the consequences of this crisis, however, were less severe. In comparison, the most difficult situation was reported at the turn of 2008 and 2009. During this period, due to a declining foreign demand, Polish companies significantly reduced their operations. The recession in the economies of the Euro area, being the main trading partners for Poland, resulted in a decrease in exports. The uncertainty on the market regarding the prospects for the Polish economy caused a transitional outflow of foreign capital, which contributed to the depreciation of the domestic currency (Obroty towarowe…2010). This in turn allowed the improvement of the Polish trade balance, as the revenues rose despite a fall in export volumes. Favourable effect of the exchange rate had therefore allowed to partially offset the negative effect of reducing demand for Polish export products.

The turn of 2008 and 2009 have also shown the impact of the early involvement of Polish entrepreneurs in currency options, which in many cases led to significant losses from financial activities (Polska wobec… 2009). Exchange rate depreciation increased the value of corporate debt in foreign currencies. The problems of foreign banks and the precarious situation on the credit market resulted in reduction of banks' ability to obtain financing on the interbank market, which forced these institutions to search for other forms of liquidity, primarily by increasing deposit rates. A limited availability of external financing, caused by stricter criteria for evaluating creditworthiness, increased margins and bank commissions, as well as by a higher level of required security, triggered, with some delay, the adjustment process in the real economy in form of a downturn (Polski rynek…2011).

In 2009, in the context of a deep slowdown in the world economy, only Poland managed to maintain a positive GDP growth among all European countries, which was triggered mainly by public investment, private consumption and exports. As a result of deterioration in the labour market there was a decline in domestic demand but of some support for the private consumption was the reduction in personal income tax rates, the elimination of the second tax threshold and a high indexation of pensions (Dług… 2009).

In 2010 there was a slight improvement in the global macroeconomic situation. As many as 22 countries out of the 27 European Union countries showed positive economic growth. Poland still was

in the forefront of those countries slightly exceeded only by Sweden and Slovakia (Dług… 2010). General improvement of the Polish economy in 2010 and its next year's follow-up was a result of the recovery of private consumption and public investment and a revival in main Polish trade partners. External demand stimulated industrial production, which contributed to the improvement in the labour market.
The food industry as a direct recipient of the agricultural products, as well as a significant partner for trade, has a large influence on food consumption through households. Therefore, it plays an important role in the economic development of the country as a whole. Subsequent to Poland joining the EU, food industry's share in GDP in Poland was estimated at about 4% (Urban 2005). The largest sector of this industry both in Poland and in the EU is the meat industry. The value of its production in the country is around EUR 12 billion and it represents approximately 18% of the food sector (Urban 2011). Subsequent to Poland joining the EU, the meat sector was one of the fastest growing areas of Polish food economy. However, a continuous weakness this industry struggles with is a high fragmentation, which imposes a lot of competition, affects the slowly increasing consolidation and represents the primary cause of not taking full advantage of the industry's potential. The main purpose of the study was to evaluate the economic situation of the enterprises of the meat industry in a changing economic environment in Poland in 2008-2012.

Material and methods

The source of data for the analysis were data of the Polish Main Statistical Office, General Veterinary Inspectorate and studies of the literature. It is on this basis that the changes in the gross domestic product, consumption and accumulation were determined and the dynamics of changes in foreign trade volumes in Poland in years 2005-2012 could be shown. Due to the limited availability of data a detailed analysis covered industrial enterprises employing more than 9 people. Limitation on requesting for this group of entities does not allow to fully understand the situation of meat industry plants in Poland during the economic crisis but allows to observe some trends and draw conclusions.
During the considered period the number of surveyed enterprises decreased from 814 in 2005 to 680 in 2012. The main data sources were the financial statements of these units. It is them that provided the basis to determine the profitability and financial liquidity of the enterprises. The reason for selecting these indicators was the fact that profitability is considered a fundamental objective of the enterprises. The efforts to optimize it must be accompanied, however, by liquidity provision. Maintaining financial liquidity is indispensable to achieve profitability. By contrast, profitability does not automatically entail liquidity provision. The analysis of financial liquidity and profitability facilitates a better assessment of the financial condition of an enterprise. In turn, the development of enterprises requires regular investment in new machinery and equipment, technologies and products. The investment leads to the increase in the value of tangible, financial, or intangible assets. The purpose of this article is to provide a general review along with some elements of deductive reasoning.

The impact of the global crisis on the Polish macroeconomic situation

The global financial and banking market crisis in 2007-2008, which began with the collapse in the market of high-risk mortgage loans in the United States, soon took over the whole world, including Poland, which revealed how financial markets are globalised and dependent on each other. In the case of the Polish economy, a negative shock of the global financial crisis came primarily through foreign trade and the financial sector. However, in the initial phase of the crisis Poland as well as some of the other developing economies was not directly affected by its consequences. By mid-2008 the Polish economy was characterized by economic growth, which peaked in 2007 (Fig. 1). At that time Polish GDP growth was 6.8%. A high rate of domestic GDP growth in 2006-2008 resulted, among other things, from domestic demand, which was strengthening as a result of accelerated investment and an increasing rate of growth of total consumption.

A rapid phase of economic growth slowed in the second half of 2008. At that time, GDP growth slowed to 5.1% and in 2009 to 1.6%. During the impact of the crisis, the Polish economy, as one of the few in Europe showed an increase. In 2010 there was a revival in economic activity. The growth rate accelerated to 3.9%. This positive trend continued also in 2011, when GDP growth was 4.3%. With regard to the GDP growth, Poland was called "the green island of Europe".
According Czarnecki (2010) the growth was possible because the managers of Polish companies were able to make quick decisions in order to strengthen the position of enterprises and to adapt them to changing market conditions. Over the next years economic growth rate declined. In 2012, GDP level increased by 2.0% compared with the previous year.

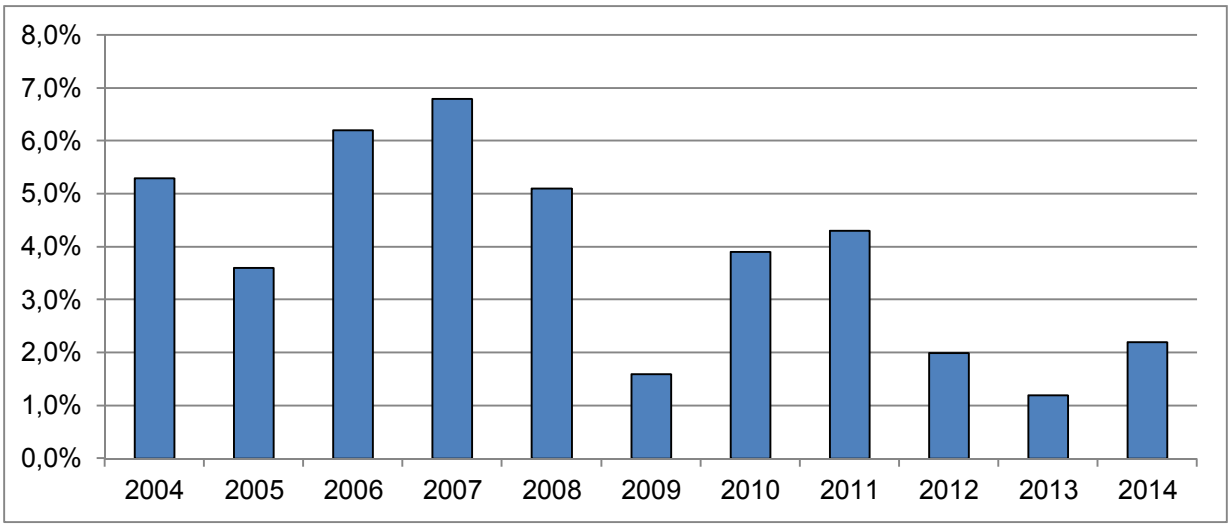

Fig. 1. Changes in GDP (the previous year = 100%)
Source: own calculations based on Eurostat data.

Economic growth in Poland was affected by three factors: consumption, investment and net exports, whose impact was different. In the years 2005-3013 the share of consumption in GDP ranged from 78.4 to 81.5% (Fig. 2). Throughout the considered period, consumption in the coming years increased, but the rate of this growth was different. Changes occurred not only in total consumption, but also in its structure, which consists of private and public consumption. The biggest increase in consumption was recorded in 2006, by 5.2% compared with the previous year. During this time, a particular increase was recorded for the level of private consumption. This was due to the following elements (Dług…2006-2008):

- a significant improvement on the labour market, resulting in a fall in the unemployment rate,
- wage growth in the economy,
- the increase in debt in the household sector,
- the transfer of EU funds to farmers,
- transfer of income from the work abroad.

In the following years the consumption in Poland was positively sensitive to the global economic crisis. In 2008, it increased by 6.1% in relation to the previous year. This could be due to the fact that, in line with the theory of consumption, every consumer tries to maintain as long as possible the current level of consumption. Over the next years, when the country's economic situation began to deteriorate, households began to reduce consumption At the same time the share of private consumption declined in favour of public consumption. In 2009 there was a slowdown in consumption growth by 4.1 percentage points (pp). The increase in consumption observed in 2010 was only temporary. In 2011-2012, a low rate of people's income growth, adverse trends in the labour market and the increase in food prices caused a decrease in the rate of consumption.

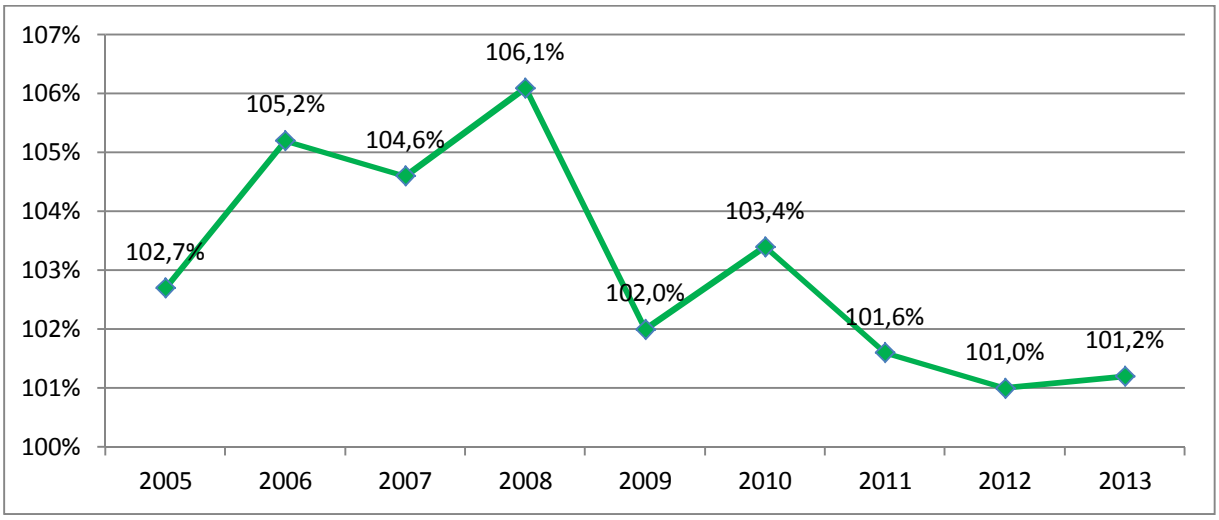

Fig.2 Dynamics of changes in consumption in Poland in years 2003–2013 (the previous year = 100%)
Source: own study.

The GDP development is largely relying on the investment in fixed assets as, in the short term, they help to stimulate the sector of suppliers and counteract unemployment. However, in the long term, they affect the growth of the economy's competitiveness by shortening delivery times and lowering transport costs (Perdzyński, Listkiewicz 2010). Compared to the consumption, accumulation had a smaller share in GDP and ranged from 18.7 to 24.5% (Fig. 3). The percentage of this component, however, showed a higher volatility over the next years. In the post-integration period, the investment growth in Poland increased from 2.7% in 2005 to 6.1% in 2008. A high rate of investment growth was triggered by (Opałka 2012):

- a large influx of capital to Poland in the form of direct foreign investment,
- increase in the use of EU funds.
- progressive revival of consumer demand.

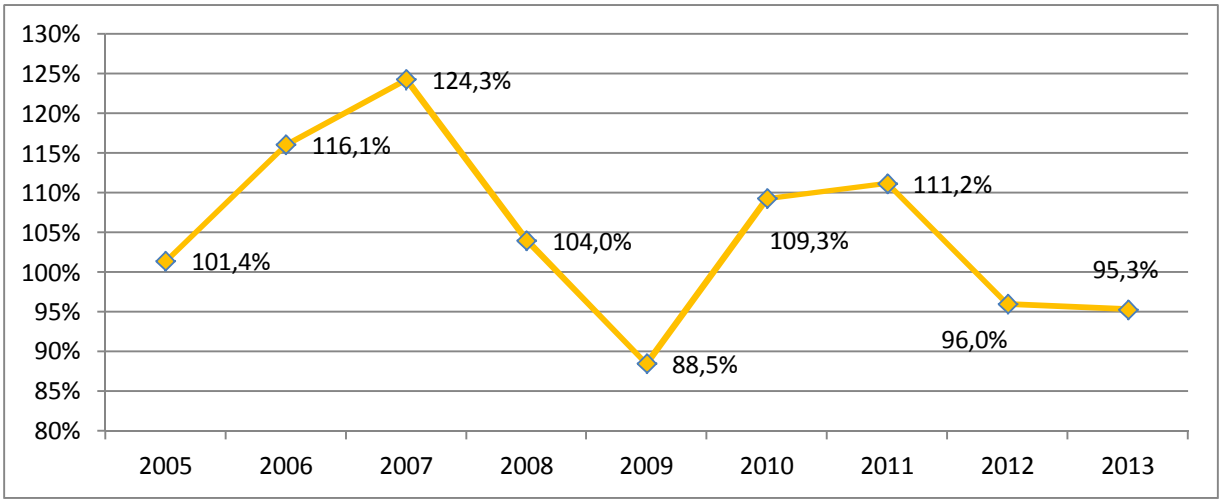

Fig. 3. Dynamics of changes in value of accumulation in Poland in years 2003–2013 (the previous year = 100%)
Source: own study.

A high share of investments that was influencing the accumulation stimulated the economy and contributed to a positive GDP growth. Changes in the market caused by the global economic crisis gradually led to the downturn in economic activity of Polish companies. In the third quarter of 2008, although the number of implemented investment projects still remained at a high level, enterprises began to limit their investment plans (Kryzys… 2009). The fourth quarter of 2008 was the last period

in which there was an increase in fixed capital formation, and then there was a drastic 60% drop in these expenditures (Tarnawska 2009). This state of affairs was a reflection of the increasingly difficult economic situation. Domestic demand was decreasing and consumer sentiments were deteriorating. In addition, due to the changes in the financial market, companies had increasing difficulties with the access to capital resources. In 2009, the growth rate of investment declined more than three times compared to 2008. A slight recovery of investment in 2010 was not permanent. Restricting investments in the following years led to the slowdown in GDP growth.
The economic situation was also significantly affected by foreign trade turnover. In the post-integration period in 2005-2008 both exports and imports of goods kept increasing in Poland. The highest growth rate was recorded in 2006 (table 1). The economic crisis led to a collapse in demand for imported goods, which already in early November 2008 resulted in the drop in turnover in all markets that counted for Poland.

Table. 1. Dynamics of changes in value of accumulation in Poland in years 2003–2013 (the previous year = 100%)

Specification	2005	2006	2007	2008	2009	2010	2011	2012	2013
eksport	108,0	114,6	109,1	107,1	93,2	112,1	107,7	103,9	114,4
import	104,7	117,3	113,7	108,0	87,6	113,9	105,5	99,3	110,4

Source: own study.

In 2009 the exports and imports of goods was reduced. At the same time, Poland achieved a positive balance in foreign trade turnover of PLN 1.0 billion. The following year the rise of the foreign trade turnover was strong. Exports increased by 12.1% and imports by 13.9%. The main reason for such a rapid and significant improvement in export performance were positive changes in the economies of major trading partners of Poland, mainly in Germany. Over the next years, the growth rate of exports and imports was lower. In 2012, a positive balance in foreign trade, reaching PLN 4.8 billion was restored due to increased exports and reduced imports, and in 2013 it rose to PLN 39.7 billion.

Changes in meat companies' profitability

In 2013 in Poland, there were about 1,453 meat plants both approved and supervised by the Central Veterinary Inspectorate, 785 of which slaughtered livestock, 1110 carried out meat cutting, and 883 were engaged in processing meat. However, a variable market situation forces consolidation processes and the reduction of market operators. Companies in the meat industry faced a particularly difficult situation in 2008-2009 due to the crisis in the financial markets. During this period, many small and medium-sized companies in the meat industry ceased their activities. These were slaughterhouses that were particularly hard hit by the crisis, a large proportion of which (21.4%) ceased further activity due to high raw material prices and the lack of liquidity. The number of cutting plants decreased by 17.9% and processing plants by 30.1%. Next year as many as 26 companies were deregistered from the meat market. The shut-downs concerned slaughterhouses and cutting plants. A different situation could be observed in the case of manufacturing plants and butcheries whose number increased in 2011 (Filo-Zagraba 2014). In addition, the crisis changed the balance of power in the meat industry. Some of the biggest meat corporations distributing their products throughout Poland started to dictate their conditions. At the same time, the economic situation was conducive to the acquisitions of medium-sized companies.

Table. 2. The structure of meat establishments in Poland in years 2008-2012

Meat processing plants allowed to:	2005	2006	2007	2008	2009	2010	2011	2012	2013
slaughter	1255	1226	1199	1136	1095	861	855	848	785
cutting	1772	1740	1607	1443	1395	1145	1165	1162	1110
processing	1740	1691	1601	1341	1258	879	885	873	883

Source: own calculations based on Veterinary Inspectorate data.

The meat industry is facing many difficulties, although it is relatively resistant to economic fluctuations. The sector is negatively affected by the reduction in pig inventory and high production costs (energy and labour costs). The meat sector is characterized by relatively low profitability as compared to the entire food industry (Fig. 4). The meat sector is characterised by relatively low profitability in relation to the whole food industry. It is connected with the growing prices of fodder, great price fluctuations of pigs for slaughter and the resulting low production profitability. This applies to both the poultry pork and beef meat sector. One way to assess the economic situation of the enterprises is to determine their profitability. Profitability means achieving a positive financial result out of the economic activity. It is used not only to evaluate enterprises but also their management's ability to generate profits on capital employed. It determines the functioning and development of individual economic entities and in the macroeconomic scale it is the engine of development of particular sectors and the whole economy. In 2005-2007, the profitability of sales in the meat industry increased from 2.17 to 2.34%. In 2008, following the outbreak of the economic crisis and the reduction in the consumption, the return on sales decreased to 1.47% and remained at a similar level in 2009. At that time, there was a decrease in the share of unprofitable businesses, from 21.8% to 16.7% in relation to the previous year, with a slight reduction of their participation in the total turnover of the sector (Rynek mięsa... 2010). The following year, there was a large increase in meat sales profitability to 3.25%. Whereas in years 2011-2013, the index was at a lower level, of about 2.0%.

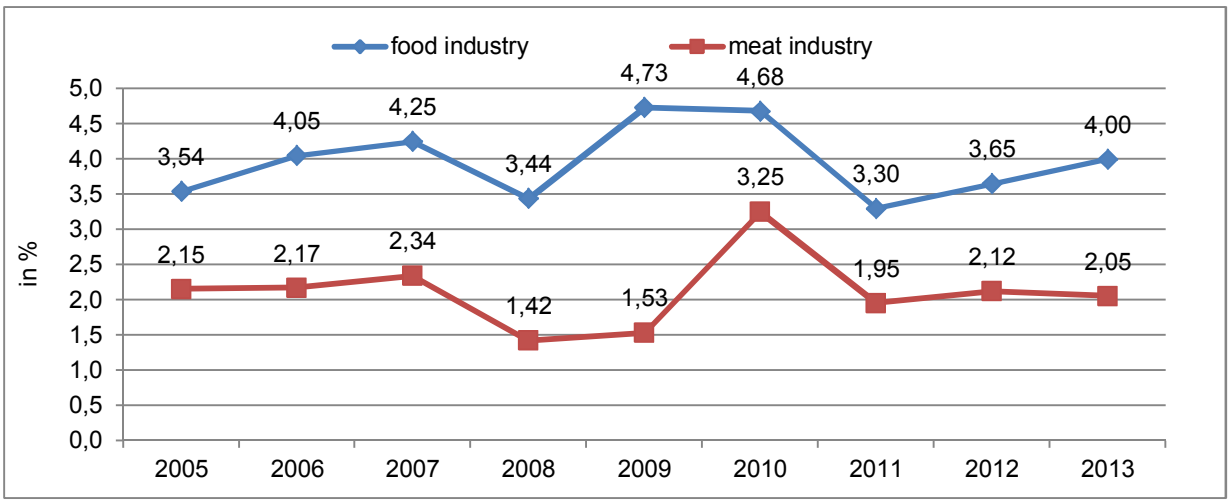

Fig. 4. Net profitability of meat industry on the background the food industry (in% of revenues)
Source: own study based on the GUS data.

In 2005-2006, the return on equity in the analysed enterprises stood at 13.0% (Fig. 5). Then, as a result of the economic crisis it decreased in 2008 to 8.3%. The next two years were a period of growth in return on equity in this type of companies. In 2010 the ratio was 16.72%. But already in 2011 it fell to 10.96%, which was due to the deteriorating economic situation in the live pig market. At the same time the value of equity in the companies surveyed in those years increased. It is only in 2008 that it saw a slight decline. In 2012, compared with 2008, the equity of the enterprises increased by¼.

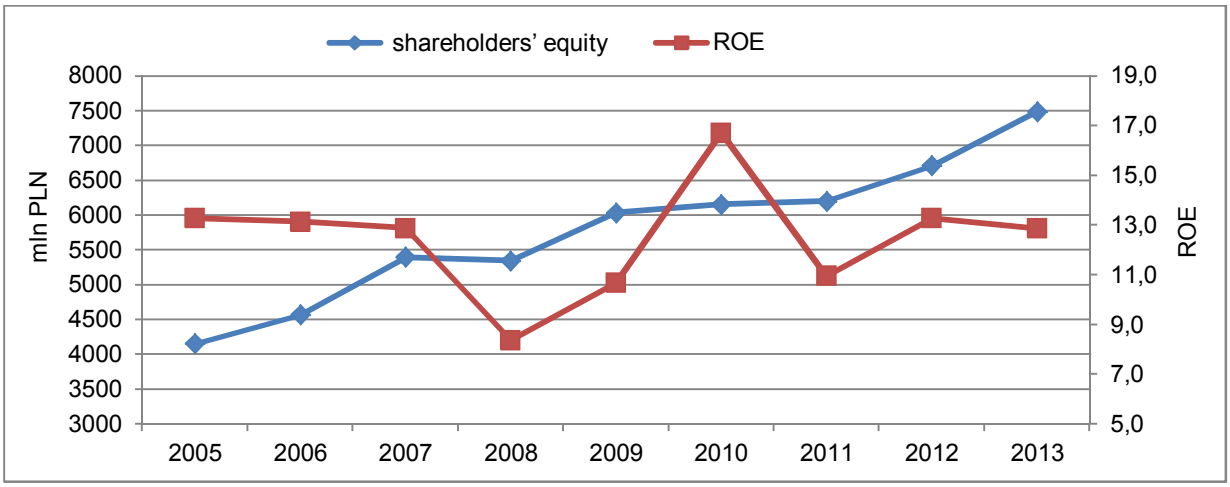

Fig. 5. Return on equity in the meat industry
Source: own study based on the GUS data (Rynek mięsa 2010, 2014).

Nevertheless, it is not profitability but liquidity or the ability to regulate obligations at maturity that is of greater importance for a business entity. Companies fail not because of the lack of profit, but as a result of a loss of financial liquidity. For a supplier a company's financial liquidity means reliability, and the achieved profitability is less important a criterion for selecting a partner. Proper way of managing liquidity is prerequisite for the survival and maintenance of the financial soundness of a business. The surveyed enterprises were characterized by a reasonable level of liquidity ratio. In the years 2005-2008 it ranged between 1.02 and 1.1% (Fig. 6). Over the next years it fell to 1.04, and then increased to 1.3% in 2013. In the initial period, similar trends occurred in the volume of own funds on the market. In 2005-2006, their level increased from PLN 87 to 405 million. Then, after a period of decline in 2007-2008, their levels increased 10-fold, from PLN 172 million in 2008 to PLN 1,723 million in 2013.

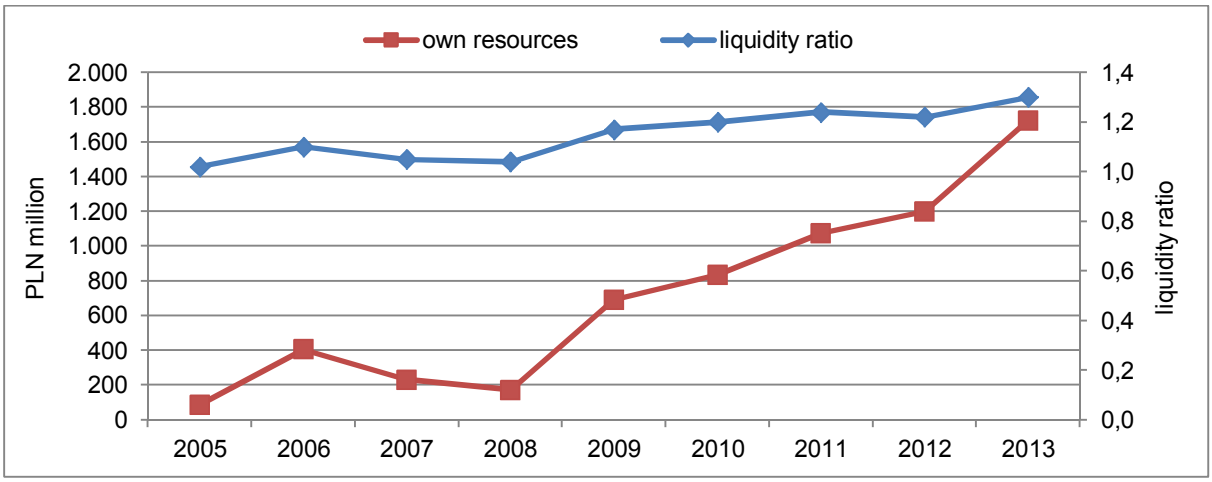

Fig. 6. The current liquidity ratio in the meat industry enterprises
Source: own study based on the GUS data (Rynek mięsa 2010, 2014).

The level of long-term debt in meat companies showed a downward trend in Poland in the post-integration period until 2011 (Fig. 7). In the years 2006-2011 it decreased from PLN 2032 million to 1329 million. Weaker financial results in the meat industry caused greater difficulties in the repayment of various types of liabilities, including loans. Then, in 2011-2013 the level of debt increased by 43.1%. In relation to the operating surplus in years 2008-2010 the debt decreased from 1.12 to 0.68. Then it increased to 0.80 in 2013.

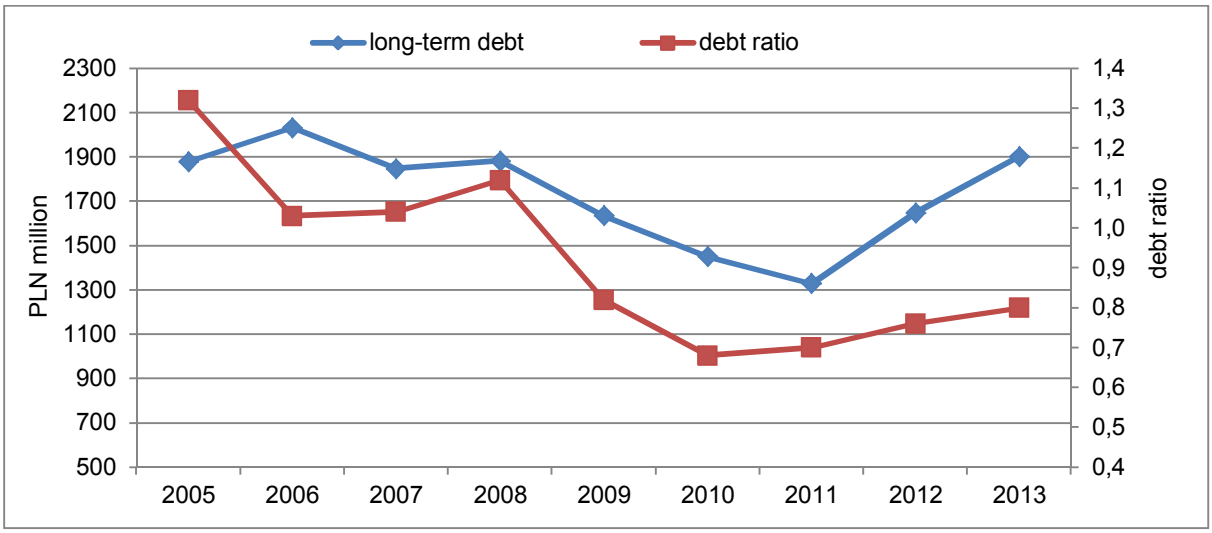

Fig. 7. Debt of meat enterprises
Source: own study based on the GUS data (Rynek mięsa 2010, 2014).

Due to adverse changes that took place in the market as a consequence of the global economic crisis, many Polish companies were forced to reduce the size of their business, and to reorganize it. In the post-integration period many companies in this sector made large investments in order to meet the EU standards and to export to the EU markets. In 2005-2006 the value of investments increased from PLN 953 million to 1036 million (Fig. 8). Unfortunately, in years 2008-2009, due to deteriorating operational conditions, some of these companies had serious problems to repay these loans (Mroczek 2010). At that time, the capital expenditure significantly reduced. In the enterprises surveyed in 2009, the value of investments decreased by PLN 325 million, that is by over 30% compared with the previous year. Over the next years more and more money was spent on investments. By 2013 their value increased by 37.7%, reflecting the development of the meat industry.

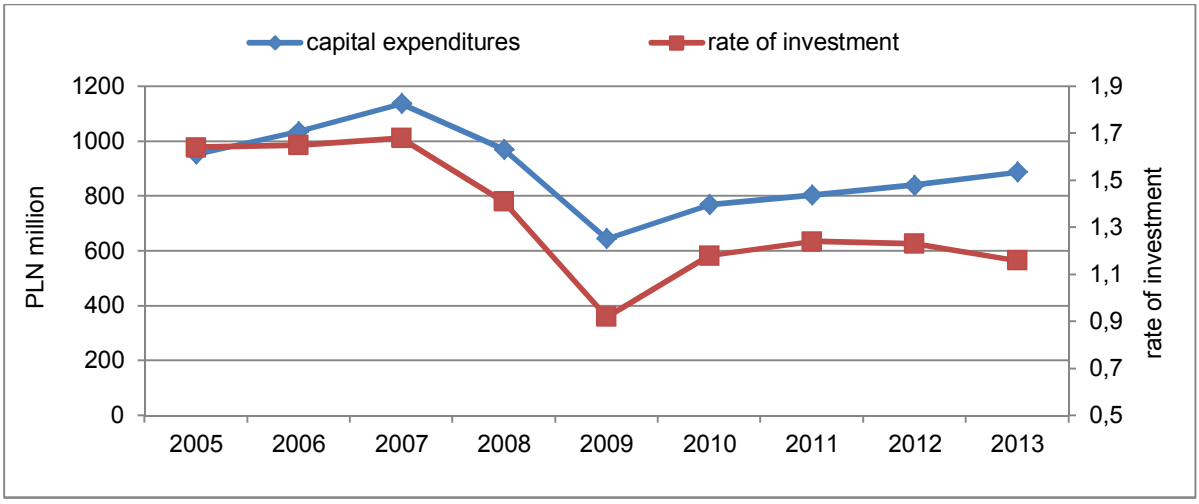

Fig. 8. Capital expenditures and the rate of investment in the meat industry
Source: own study based on the GUS data (Rynek mięsa 2010, 2014).

The rate of investment that is the relation of investments to depreciation took a different shape. In 2004 this ratio was 1.64 and remained at a similar level to 2007. Then, following the economic crisis, it fell to 0.92%. The fall of the investment rate below one in 2009 meant that the value of investment outlays was not sufficient to restore sustained productive assets. This could be mainly due to the difficult and uncertain situation on the financial markets, which resulted in banks tightening lending standards towards all stakeholders. Over the next years it increased. Thanks to the investments companies can improve their competitive strength and economic and financial situation.

Conclusions

The food industry, including meat sector is an important part of the national economy, closely linked with other sectors and having a direct impact on them. Troubles in this sector affect the entire agriculture and trade and have an impact on the level of exports and consumption of food. During the global economic crisis in 2009 and 2010 Poland recorded the growth of Gross Domestic Product. Nonetheless, the majority of Polish enterprises were affected by the economic slowdown, which resulted in an imbalance in public finances. The crisis caused a reduction in foreign and domestic investment, reduced production and demand and corporate earnings.
The global financial crisis also affected the meat industry companies. Among the enterprises employing 9 people or more the return on equity in 2008-2010 increased more than 2-fold. During the same period, the proportion of unprofitable companies fell from 21.8% to 13.1%. However, the improvements in corporate profitability during the global economic crisis were of a temporary nature. In 2011 there was a decline in profitability, which was influenced by other factors in the live pig market, mainly by a large reduction in the number of pigs in the country in 2006-2013.
In 2008-2010, there could also be observed an improvement of the current liquidity of companies in the meat industry from 1.04 to 1.20. Concurrently, there was more than a 4-fold increase in the share of own funds on the market. In subsequent years, the financial liquidity of enterprises amounted to around 1.2, with a further increase in the share of own funds in trading. This demonstrates the rational management of working capital in shaping corporate finance.
An important phenomenon in the functioning of meat enterprises in Poland during the economic crisis was the reduction of a long-term debt. In the years 2008-2011 it decreased by 29.4% in the analysed companies. This was due to a limited availability of bank loans and greater demands in this regard.
The data indicate that the reduction of capital expenditure, which in 2007-2009 decreased by 43.3% constituted some threat to the development of economic activity. In 2009, the level of capital expenditures as against depreciation decreased to 0.92%, which meant that their value was not sufficient to restore sustained productive assets. In subsequent years, the value of investment kept increasing gradually. Currently Improving the financial situation of Polish companies, meat requires more consolidation and properly chosen strategy of action adapted to the situation in this market.

Acknowledgements

The project was funded by the National Science Centre on the basis of decision DEC-2013/09/B/HS4/03606.

Bibliography

Czarnecki, P. (2010). Elastyczność kluczem do zwycięstwa. Polskie przedsiębiorstwa. Lista 2000. *Rzeczpospolita*, 2010.10.26.

Dług publiczny – Raport Roczny 2006-2008, Ministerstwo Finansów.

Dług publiczny – Raport Roczny 2009, Ministerstwo Finansów.

Dług publiczny – Raport Roczny 2010, Ministerstwo Finansów.

Filo-Zagraba, A. (2014). Czy na rynku jest jeszcze miejsce dla nowych producentów? *Gazeta finansowa,* 2014.11.14-20, 41.

Kryzys na rynkach finansowych. Wyzwania stojące przed spółkami, http://www.pwc.com/pl (accessed on October 20, 2015).

Mroczek R., 2010. Wyzwania i bariery produkcji mięsa w Polsce. *Przemysł Spożywczy* 3, 2-8.

Obroty towarowe z zagranicą w fazie wychodzenia z kryzysu. Ministerstwo Gospodarki, Warszawa 2010.

Opałka, A. (2012). Wpływ kryzysu na światowych rynkach finansowych na sytuację makroekonomiczną Polski – analiza wybranych wskaźników. *Zeszyty Naukowe Uniwersytetu Szczecińskiego. Finanse. Rynki Finansowe. Ubezpieczenia*, 729 (54), 99-110.

Perdzyński, K. & Listkiewicz, S. (2010). Inwestycje infrastrukturalne jako instrument pobudzenia gospodarki w warunkach kryzysu finansowego. *MAZOWSZE Studia Regionalne,* 4.

Polska wobec światowego kryzysu gospodarczego. NBP, Warszawa 2009.

Polski rynek finansowy w obliczu kryzysu finansowego w latach 2008–2009, Raport Urzędu Komisji Nadzoru Finansowego, Warszawa 2010.

Rynek mięsa. Stan i perspektywy. 2010. Analizy Rynkowe 38.

Rynek mięsa. Stan i perspektywy. 2014. Analizy Rynkowe 47.

Szczepankowski, P. (2007). *Wycena i zarządzanie wartością przedsiębiorstwa*. Wydawnictwo Naukowe PWN, Warszawa.

Tarnawska, E. (2009). Kondycja finansowa i uwarunkowania działania polskich przedsiębiorstw w dobie kryzysu, http://www.konferencja.edu.pl (accessed on November 5, 2015).

Urban, R. (2011). Polski przemysł mleczarski, mięsny i drobiarski w Unii. *Przemysł Spożywczy* 3, 6-16.