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## THE IMPACT OF THE ECONOMIC AND FINANCIAL CRISES ON THE AGRI-FOOD SECTOR IN POLAND

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### Abstract

*The global crisis affected Poland, putting its economic growth in jeopardy. This impact is reflected in deteriorated GDP growth prospects, reduced lending activity, limited access to external financing. Thus, the global crisis has become the key reason for the economic slowdown observed in Poland since mid-2008. Objective of this paper is to analyze the influence of economic crisis on the economic situation in agriculture and food industry in Poland.*

**Key words:** *polish agro-food sectors, global crisis, foreign trade, macroeconomic conditions, development, food products, agricultural potentials*

### Introduction

The problem of economic crisis seems to be well described in economic sciences at the theoretical level. However, theoretical models of the economy, economic analyses and other studies would be of no avail if not for their practical applications (Fiedor, 2010). Thus, the theories developed by monetarists or representatives of the neoclassical approach constitute the basis for economic and monetary policies pursued by many countries in the world. Nevertheless, the onset of each global economic crisis comes as a surprise, virtually unpreventable, and its causes are difficult to be reliably identified. It is still hard to predict its effects which tend to be very costly and burdensome at the social level.

In the current economic crisis, many countries worldwide (not to say all of them) have resorted to intervention methods. However, is state interference in the economy beneficial to it and what will be the long-term impact of such intervention? Those are the questions which only a handful of economists are willing to answer, and even fewer are capable of doing so. Crises accompanied the fall of great powers,

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played a prominent role in the formation of new empires as well as of economic and social structures. The emergence and development of capitalism represented a streak of economic crises and the accompanying political and social phenomena (Musiał, 2010). The history of civilisation can be seen as a series of crises posing tremendous challenges to people and responses to such challenges.

As a rule, economic crisis today represents complex developments in terms of causes, transmission mechanisms, dynamics and consequences. In general, they are rooted in the functioning of the product markets, currency and banking markets, enterprises and other entities operating in the economy as well as in government policies. There are also multi-directional interactions, not yet full recognised and identified. The disturbances observed in financial markets in 2008 and following years very quickly spread to raw materials markets, including agricultural and food products, which increased the fluctuations and instability of the economic and financial situation of agriculture. The financial crisis has been increasingly affecting economic activities. The characteristic features include:

- due to the globalisation processes in the world economy, the crises are global as well and have hit developed economies and high-growth emerging economies alike and
- the complexity of the current financial systems and strong links between particular elements as well as their role in stimulating demand and economic activity means that the crises have affected all areas of economic life.

Due to the globalisation processes in the world economy, the economic crisis has affected practically all countries in the world, developed and rapidly-growing emerging economies alike. The confidence in the banking system was undermined and economic growth slowed down dramatically.

### **Macroeconomic conditions for the development of the Polish food sector during the global crisis**

The signs of the economic and financial crises in Poland have been different from those observed in other developed countries, where it surfaced first in the capital market, then hit the banking sector, and finally, in developed economies, affected the whole economy. When assessing the prospects for the Polish economy facing the crises, it should be pointed out that historically economic recessions which are preceded by a financial crisis last longer than those not associated with a financial crisis. Recessions are more severe and last longer if the economy enters a crisis with a number of imbalances, such as a significant current account deficit, budget deficit or lack of household savings. What the Polish economy is currently facing is an economic slowdown rather than a recession. The indebtedness is low and Polish consumers and enterprises are less dependent on loans than those in developed countries. Economies such as Poland's that are however already open to cross-border movement of goods, characterised by high

productivity, lower elasticity of asset substitution and lower fixed costs and are thus better positioned to cope with crises in the economic sector (Wigier, 2010).

Any assessment of Poland's economic situation in the crises period cannot overlook the impact of EU accession in 2004. EU membership gave the national economy a strong development impulse. Between 2004 and 2007 the annual growth rate of GDP was about 6%. In 2008, GDP rose by 4.9%, thus a marked slowdown. 2009 witnessed a decline in GDP by 1.1% in the second quarter, resulting in an annual growth rate of about 1.7% by the end of the year. It is noted that other EU Member States suffered a much sharper decrease in GDP. In general, after EU accession Poland has reduced the distance to the EU average and somewhat narrowed the development gap.

*Table 1 Main macroeconomic indicators for Poland in 2004–2010 (%)*

Year	2004	2005	2006	2007	2008	2009*	2010**
GDP growth rate	5.3	3.6	6.2	6.7	4.9	1.7	2.7
Unemployment rate	19.0	17.6	14.8	11.2	9.5	11.2	13.9
Inflation rate	3.5	2.1	1.0	2.5	4.2	2.9	1.5
Budget deficit	-5.2	-4.3	-3.9	-1.9	-3.9	-6.6	-6.3
Current account balance	-1.1	-1.2	-2.7	-4.7	-5.5	n.a.	n.a.

\* *not final data;*

\*\**estimates; Source: Author's estimates based on GUS and Eurostat data*

As concerns the demand-side sources of economic growth between 2004 and 2008, the most stable factor of domestic demand appears to have been private consumption, fuelling GDP growth even in periods of unfavourable developments in the external environment. Following EU accession, private consumption increased by an annual average of about 5%. This stemmed from the improving situation in the labour market and rising real wages. A marked slowdown in economic activity at the turn of 2008/2009 had an adverse effect on the positive trends observed in previous years. After accession to the UE Poland's economy benefited from EU transfers, mostly within the framework of the common agricultural policy and the cohesion policy. Taking into account payment of contribution to EU budget Poland received in 2009 6.5 billions of EUR that is 2 billions more than in 2008. From the moment of launching development programmes for 2007 – 2013 till September 2010 over 147 thousands of application was submitted with total amount of 86 billions of EUR. In the same time 42 thousands of projects were accepted equal to 49 billions of EUR of which 32,5 billions are from EU budget. The decline of domestic economy was therefore alleviated by the inflow of EU funds stimulating investment and by the depreciation of the Polish currency against the EUR.

## Polish agricultural holdings in the global financial crises

When assessing the consequences of the economic and financial crises for the food sector, it is noted that 2008 was most difficult for agriculture in recent years, while 2009 saw some improvement in the market conditions for agricultural production. This included an increase of purchase prices for agricultural raw materials (4.2% in December 2009, year on year) and a decline in retail prices for agricultural inputs (by an average of 3.5%) while retail prices for mineral fertilisers dropped by 20% in 2009. However, purchase prices increased only slightly faster than retail food prices which went up by an average of 3.6% between January and December 2009. As a result, in 2009 the cumulated agricultural price scissors index, expressing the ratio of change of farm inputs and outputs prices' prices, was above 108 (compared with December 2008), while in 2008 it was merely 77.4 (compared to the previous year). In the period 2004-2009 the realised farm income significantly varied between particular types of farming.

*Table 2 Family farm income per full-time worker by type of farming in 2004–2009 in EUR*

Year	Type of farm							
	Field crops	Horticultural crops	Permanent crops	Dairy cows	Grazing stock	Granivores	Mixed	Total *
2004	3393	5296	3664	3755	1965	8406	2390	3205
2005	3145	6112	4613	4827	3237	8872	2622	3502
2006	4802	6744	6135	5504	4485	7401	3453	4390
2007	6210	7081	6932	6519	5912	8608	3372	4936
2008	4665	5613	3556	5325	3992	8525	3020	4042
2009	4399	4675	261	5545	5689	10842	3429	4343

*Source: calculations based on the Polish FADN data. 1 EUR = 4PLN*

The programmes of subsidies on current operations of agricultural holdings had a crucial effect on the level of farmers' income, particularly in the last years of the period in question. Whereas subsidies played a relatively minor role in 2004, in the last years of the period farm income was determined by subsidies rather than by current operations. According to the estimation account for 2009, in holdings representing three types of farming the subsidies received also allowed to compensate for losses on current operations realised at market prices.

*Table 3 Ratio of subsidies on current operations to family farm income per full-time worker by type of farming in 2004–2009 in %*

Year	Type of farm							
	Field crops	Horticultural crops	Permanent crops	Dairy cows	Grazing stock	Granivores	Mixed	Total *
2004	21.7	0.9	6.5	11.9	16.4	4.2	14.9	13.5
2005	57.0	5.3	17.0	29.2	51.1	17.2	50.0	39.7
2006	56.0	8.7	19.4	40.5	54.3	30.2	58.2	48.3
2007	35.8	5.9	12.0	25.8	32.2	18.8	50.8	36.0
2008	68.6	8.3	28.3	43.7	75.3	28.4	81.0	62.9
2009	103.4	14.1	541.2	60.4	71.1	32.2	101.7	83.1

Source: [6], calculations based on the Polish FADN data.

The better market conditions for agricultural production observed in 2009 could not significantly improve the income situation of Polish farmers who still suffered the consequences of unfavourable price changes in 2008. The situation in agricultural and food markets encouraged purchasing and processing entities to shift the burden of the crises onto farmers. The deterioration of the financial standing of agricultural enterprises and holdings does not however imply a deep recession. The analysis of average enterprises results demonstrates that agriculture at large continues to enjoy sufficient creditworthiness.

The response to deteriorating market conditions differs between large agricultural holdings, with intensive production, and small farms, mainly oriented towards subsistence or semi-subsistence production, the latter for years characterised by limited replacement of productive assets. Commercial holdings are more exposed to adverse effects of economic downturns, but they benefit more from intervention measures undertaken at national or European Community level. Small farms in turn respond to deteriorating cost and price relations with increasingly extensive production. This further aggravates the prevalence of rural poverty and calls for additional methods and measures to deal with this problem.

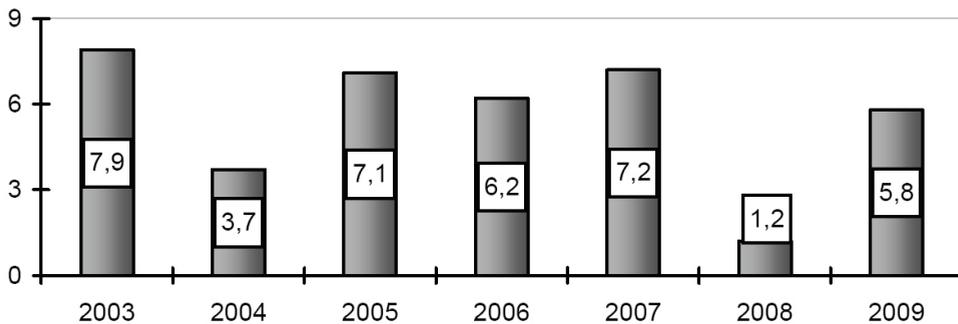
### **Impact of the crises on agri-food sector and foreign trade**

The production performance of the food industry in 2008, particularly in the second half of the year, and in the first half of 2009 clearly marks the end of the production growth triggered by Poland's accession to the European Union and clearly shows the impact of the global economic crisis, increasingly affecting the Polish economy. However, the food sector, catering for the basic needs of the population, has been hit by the crises to a lesser extent than other parts of the national economy. This is confirmed by the results for the second half of 2009, when it became apparent that the recorded decline in the marketed production of food products and beverages was only temporary (Urban, 2008). Nevertheless, the strong export orientation of Poland's agri-food sector could pose a major threat to growth in future. Since the largest buyers of Polish food products: Germany, the United Kingdom, Ukraine and Russia

are experiencing a recession, the negative effects were only mitigated by a strong depreciation of the Polish currency, in effect improving the profitability of exports and reducing the incentive for imports.

The analysis of annual growth rates of sold production in the food industry confirms the robust increase in 2003–2007 and a marked slowdown in output in 2008 (Figure 1). Throughout 2008, the value of sold production in the food industry at constant prices went up by a mere 1.2%. Crisis developments were not the sole reason for the deteriorated production performance in the food industry in 2008. It was also contributed to by an unusually deep trough in the pig meat cycle, the reform of the sugar market and a drop in sugar production as well as by problems encountered in the bio fuel sector. Those factors combined brought about a sharp output contraction in food processing in these sectors of the food economy. The first months of 2009 turned out to be surprisingly favourable for the Polish food industry. From January to November 2009, the value of the sold production of food products and beverages at constant prices increased by as much as 5.8% (on the corresponding period of the previous year).

*Figure 1. Growth rate of sold production of food products and beverages in %, constant prices*

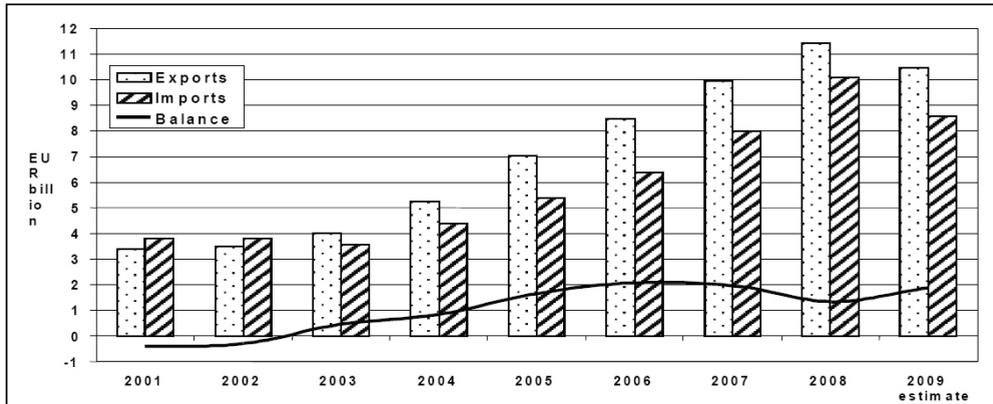


*Source: own study based on "Statistical Yearbooks", GUS, Warsaw 2004-2008, and "Statistical Bulletin", GUS no 11/2009.*

Foreign trade in agri-food products constitutes a vital component for the Polish agri-food sector (Figure 2). Accession to the EU resulted in rapid growth of this group of exports. In both export and import, until 2008 Poland was increasingly dependent on trade with other EU Member States. 2009 saw a reversal of previous trend of this foreign trade concentration. The crises first hit trade with the EU-15, both in terms of exports and imports. The shifts in the geographical composition of exports reflect that domestic exporters again started to diversify outlets. This is reflected in a decreasing share of economically developed countries, including the EU, and a rising proportion of the CIS countries (particularly Russia) and developing countries. In a situation of declining imports, developed economies diminish in importance as recipients of Polish products (e.g. EFTA), while developing countries play an increasingly important role. Such changes point to the search for cheaper sources of supply and a relatively greater

share of raw material products dominating in imports from developing countries. A sharper decline of imports compared to exports resulted in a higher export surplus. This positive effect is only temporary and observed in the economy as a whole, while for particular industries and economic operators it implies lower sales and income, which may eventually result in business bankruptcies.

Figure 2. Polish foreign trade in agri-food products in 2001–2009 (EUR billion)



Source: own study based on “Statistical Yearbooks”, GUS, Warsaw 2004-2008, and “Statistical Bulletin”, GUS no 11/2009

Shrinking demand has primarily affected exporters of processed products. The crises hit the most severely markets in processed products, i.e. more expensive, characterised by less rigid demand compared to basic food products or agricultural raw materials. Declining exports also stemmed from a decrease of export prices. Apart from the contracting demand and decline of prices in world markets, the appreciation of the Polish currency also had a downward effect on Poland’s agri-food exports, although, at the same time, it contributed to lower prices for imported products. For this reason, Poland’s price advantage in exports diminished even further. The conclusion is that the economic crisis undoubtedly had a negative impact on the competitiveness of Polish products in foreign markets.

### Final remarks and conclusions

The analysis of the impacts of the 2008 and 2009 economic and financial crises on the Polish economy leads to the unambiguous conclusion that the crises’ root cause lies outside Poland rather than in the national economy. Furthermore, the effects of the crises have not been as strong as in the case of countries with closer links with the US economy and its banking and financial sector.

Nevertheless, the current global crises have had a greater impact on the agri-food sector in Poland compared to recent recessions as the basic functions of agriculture related to food production involve increasingly complex activities and factors and are dependent on conditions outside agriculture, rather than in agriculture as such.. The

situation in the Polish food sector as a whole was somewhat better than in other sections of the national economy.

The analysis of factors influencing GDP growth demonstrates that the economic growth model prevailing in Poland is based on classical production factors: labour, land and capital, as still few sectors of the economy rely on knowledge and skills as important factors of growth, in line the requirements of a knowledge-based economy. Higher rates of economic growth require investment, thus a labour-economising and investment-oriented distribution of national income. Investment and the programmes to reduce unemployment involve in turn limitations on real wages increase. The greater the rise in real wages, the more benefits enterprises derives from reduction of employment. Slower growth of unit labour costs in order to increase employment facilitates combating inflation and balancing the state budget through lower costs of the indexation of wages in the public sector and pensions.

The ability to create and constantly absorb innovation will be the greatest challenge to the Polish economy in the post-crisis decade of the 21<sup>st</sup> century. The understanding of innovation has changed recently, to mean a complex of developments and processes creating new standards and production technologies (Szczepaniak, 2009). The problem of innovative thinking and acting has become particularly dramatic now that the Polish economy is open. An open space which is not innovative becomes a dependent space in economic and scientific terms.

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