

EVOLUTION OF THE ROLE AND SIGNIFICANCE OF AGRICULTURE FOR THE POLISH ECONOMY IN 1989-2014

Abstract

Socio-economic transformation in the food sector started earlier than in other sectors of the economy, i.e. in the summer of 1989 along with implementation of market solutions. The first period of the transformation was marked by a significant drop in all economic and social indices in agriculture, including a severe drop in the farmers' income. A change in the status quo began at the turn of the 20th and 21st century.

However, only after Poland's accession to the EU the food sector has started to develop considerably faster. The co-financing of the sector from the national budget and the EU funds fostered a substantial modernisation of agribusiness thus influencing the improvement in the income situation of agricultural producers. As a result of the processes of adjustment to the market conditions and membership in the EU, the size and structure of agricultural production changed significantly. In 2003, after nearly 50 years of a negative balance in foreign trade in agri-food products, Poland became a major player on the world market.

The national economy in Poland, just as in most of the economies worldwide, clearly tends to lessen the role of agriculture taking into account its share in the global output and GDP. In Poland, this was especially visible in 1989-2002 (Table 1). After Poland's accession to the EU, and specifically in the last several years when the effects of the CAP have become apparent, the situation within this scope relatively stabilised. In 2013, agriculture generated 4.1% of the global output and 3.5% of the GDP, respectively. Upon Poland's accession to the EU, the absolute value of capital expenditures in agriculture clearly increased and the "net" effect of supporting investments may be estimated at PLN 11-12 billion. Still, ca. 15% of all employees in the national economy work in the agricultural

sector, and they have 5.4% of the total gross fixed assets at their disposal. This very high share of employees is a consequence of rather slow structural changes in agriculture and demographic conditions.

Table 1

Agriculture in the national economy – share (%)^a

Year	Global output	GDP	Capital expenditure ^b	Gross fixed assets	Employees	
					A	B
1989	14.6	11.8	12.8	22.1	26.4	
1990	10.5	7.1	11.4	23.0	25.4	
1992	8.2	6.4	5.9	21.7	25.1	
1995	8.7	7.0	3.3	12.8	24.3	
2002	4.9	4.0	2.1	8.2	26.4	15.6
2003	4.7	3.9	2.0	8.2		15.7
2004	5.0	4.5	2.2	7.9		15.6
2005	4.5	4.0	1.8	7.6		15.5
2006	4.2	3.7	1.9	7.1		15.3
2007	4.0	4.3	1.9	6.8		14.8
2008	4.0	3.7	1.8	6.4		14.2
2009	3.9	3.6	1.7	6.2		14.2
2010	3.8	3.3	1.7	5.9		14.6
2011	4.1	3.6	1.8	5.6		14.4
2012	4.1	3.5	1.9	5.4		14.9

^a By 2002 – data for *Rolnictwo*, as of 2002 – data for *Rolnictwo z leśnictwem, łowiectwem i rybactwem*.

^b As of 2002 – data for *Uprawy rolne, chów i hodowla zwierząt oraz łowiectwo, bez budynków mieszkalnych*.

Source: *Rocznik Statystyczny RP* (respective yearbooks), GUS, Warsaw; *Pracujący w Gospodarce Narodowej* (respective yearbooks), GUS, Warsaw; *Środki Trwałe w Gospodarce Narodowej* (respective yearbooks), GUS, Warsaw; own calculations.

Agriculture's share in value added generation and redistribution, results from its position in the structure of the national economy. Agriculture – as a primary sector – by its nature is subject to depreciation in the system of inter-industry flows, which means that its “executed” output is smaller than the “generated” one, and this difference is greater than the paid taxes and benefits. This has several causes.

Firstly, agriculture is the weaker partner on the market. Farmers are scattered and thus they are unable to stand up to the organised power of the area of buying-in and processing of agricultural raw materials. The bargaining power of farmers on the market is, therefore, too limited. The inequality of partners on the market causes price dictate of agriculture environment entities.

Secondly, there is a gap, both in spatial and economic sense, between agriculture – as a primary sector, and the final purchaser of goods (i.e. consumer

and exporter). Whereas the market discriminates in favour of the final stages of raw materials processing into final products. The links that are closer to the final purchaser are more likely to bring price advantages, than links more distant in economic sense, as the former actually have a greater impact on the prices of their products and services.

Thirdly, by now the long-term development mechanism in Poland failed to favour the competitive capacity of agriculture on the internal market. Agriculture was, and still is regarded as a backward and non-developmental sector. Acting from within, it was not so far able to exceed the critical mass of reforms and it actually functioned at the peripheries of the national economy. Economically weak farms were not really able to accumulate funds and invest thus deteriorating their own economic and social situation.

Fourthly, there is the issue of low income elasticity of demand for food. The economic situation of agriculture depends primarily on the overall business cycle. Under the conditions of the market economy, the final demand for agri-food products is vital for agricultural climate. The national accounts show that in 1993-2002, the growth in GDP by 1 percentage point created the possibility to increase individual food consumption by 0.5 percentage point. The upper limit of the food demand growth rate is set by the growth rate of the population income and income elasticity of demand for food. From the perspective of supply, this limit is established by the aggregated coefficient of conversion of agricultural raw materials into final products.

Therefore, growth-oriented macroeconomic policy translating into a high growth rate of demand for agricultural products is the most effective measure to develop food sector and income situation of food producers.

The current and future final demand for agricultural raw materials is lower than the potential possibilities of agriculture. It is possible to obtain the socially acceptable production level from utilised agricultural area (UAA) on a level smaller than the current one by ca. 15% and with the employment rate lower by ca. 14%.

Fifthly, this is also caused by lower labour productivity in agriculture than in industry. Thus, the main roads leading to eliminate the spread of income involve structural changes in agriculture, modernisation of farms and elimination of those which are unable to survive on the market. This idea was an important premise when forming the Common Agricultural Policy of the EEC.

Polish agriculture at the initial transformation stage

History will remember the 1990s as the years of political transformation. In the food sector, this process began earlier than anywhere else, i.e. in the summer of 1989 the prices of agri-food products (with some exceptions) were deregulated which marked the beginning of market liberalisation. The following made it possible: (1) private property prevailed in agriculture; (2) large agricultural market enclaves have already been controlled by the principles of the free market for a long time (i.e. fruit and vegetable market); (3) the food market, back then, was much closer to the equilibrium than any other branch market; (4) farmers

were ready to support these reforms as they were waiting for increases in the buying-in of agricultural products, but they were not aware, as of yet, that market liberalisation (under the contemporary conditions) is linked to a surge in prices of the means of production, increase in import competing with the domestic output and, consequently, a real drop in agricultural income (some part of the phenomena originated in rapidly growing inflation which usually accompanies transformation of imbalanced economies).

Considerable changes in the economic system of the state were introduced at the beginning of 1990. The new legislation eliminated, step by step, the centralised market control mechanisms and introduced market solutions. What proved to be the most important and to have the widest impact were the macroeconomic regulations, including abolition of distribution of once deficit goods, proclamation of economic freedom (all activity which is not prohibited by law is permitted), deregulation of prices, implementation of the new monetary policy (elastic formation of exchange rate concluded with introduction of internal convertibility of Polish zloty), package of anti-inflationary initiatives, foreign trade liberalisation, privatisation of state property (including also in agriculture), intensification of cooperation in cooperatives, etc.

All these political changes shaped the brand new setting of agriculture and, through it, exerted (positive and negative) impact on rural areas and agriculture. At that time, there were not many changes directly targeted at agriculture (except for those of August 1989); however, it turned out that agriculture – as an open system – absorbed the changes, and relatively quickly started to be part of the new economic structures. This confirmed the well-known thesis that agricultural climate largely depends on the general business climate.

The political changes took place in the conditions of deep recession. Recession in Poland actually started in the second half of the 1980s; hence it preceded the market liberalisation process. Therefore, it should not be claimed that market liberalisation caused the recession; it could have aggravated the crisis phenomena, but it did not cause it. Recession in agriculture had a secondary character, i.e. it was transferred to it from other branches of the national economy. Its first symptoms included the appearance of demand barrier and market restriction. It was, actually, the drop in the level of population income in real terms (by ca. 1/3 over a very short time) that caused a plunge in the demand for food, a drop in prices obtained by farmers and their incomes. Thus recession in agriculture was caused by global changes in the entire economy.

Agriculture, as a branch of the national economy, had to face the competition on two important levels. First of all, liberalisation of economic relations gave new meaning to inter-industry competitiveness. Under the protectionist system this competitiveness was “asleep”. At that time, inter-industry relations were controlled and established by a plan, which was achieved by means of both the prices fixed by the state, and “planned” inter-industry transfers of capital, labour force, technology, know-how, etc. Liberalisation abrogated these instruments and exposed agriculture to the competition of stronger and better organised sectors. Economically weak agriculture was at the losing position

already at the starting line. This was initially manifested in the reduction in the stream of capital channelled to agriculture from external sources, which was evidenced by very small inflow of foreign capital to agriculture. It is estimated that only ca. 2% of the total amount of capital which supplied the Polish economy in the 1990s was allocated to agriculture. The share of foreign capital in industries manufacturing the means of production for agriculture and promoting new technologies was also insignificant. Food industry attracted far greater interest (brewing, fat, confectionery, concentrated foods and partly dairy, and fruit and vegetable industries), but the return impact of these investments on agriculture was minute.

Secondly, the market mechanism and prices became another area of inter-industry competitiveness. The market mechanism depreciates weaker partners and, if there are no safeguard mechanisms – it polarises the economic arena. To support growth processes agriculture has to use transfer incomes that are subject to tenders and such situation, on the other hand, inevitably provokes conflicts caused by allocation of budget funds.

Thirdly, the competitive capacities of a farmer “on the inside” decrease the huge open and hidden unemployment on rural areas. Liberalisation of the economy, progressing privatisation and seeking for the sources of “new efficiency” motivated enterprises to reduce employment. Farmers-workers were first to lose their jobs thus causing re-transfer of the labour force to rural areas (ca. 1 million people). The suction force of non-agricultural sectors for rural labour force decreased practically to zero. This caused enormous structural unemployment (1.8-2.0 million people). Thereby part of the costs of restructuring of the industry (and the entire economy) was transferred to rural areas which reduced its already low competitive capacity.

Competition with external partners became another huge competitive area, which was opened by the restructuring policy. Of course, Polish agriculture was always present on the global markets but the 1990s brought new phenomena. Abolition of the state’s monopoly in foreign trade, authorisation of free trade, reduction of import duties in practice opened up national borders, which in 1990-93 caused a surge in import of food products (2.3 times, including agricultural products 4.1 times) and, at the same time, a drop in export of agri-food products by 25%, and agricultural products by 46% (expressed in dollars). In later years, the proportions between import and export improved to the point when, in 1997, the import of agri-food products was 1.7 times higher than in 1993, while export 2 times (Analiza produkcyjno-ekonomicznej... 1998).

In the period of shock therapy two types of adjustments occurred in Poland: positive and negative. In the first period (1990-1992), negative adjustments were definitely predominant. Because of political impeachment of the sector and putting privatisation before commercialisation, a significant part of the assets at most of the state-owned farms was destroyed, sold out and wasted, staff disintegrated and unemployment grew, especially in economically weaker units that fell first. The positive adjustments proved difficult and disproportionately minor against expectations. It was widely expected that the land of the state-owned farms will

support the rural sector. This did not happen. Capital privatisation proved to be very limited (486.7 thousand ha were sold, i.e. only 13% of the land taken over from state-owned farms), and the share of farmers was insignificant. Impermanent forms of land development predominated, including the share of leases amounting to 71.8% and 13.4% of land under temporary administration or management.

The conditions of farming in agriculture in the pre-accession period changed to a significant and sometimes even dramatic degree. Several stages can be identified in this period.

The starting point was optimistic. Deregulation of prices of agricultural products in the second half of 1989 and continuingly high level of budget subsidies to the manufactured means of production brought unprecedented income growth to agriculture. The year 1990, was extremely different, though. Given the direction of the economic policy liberalisation taken, subsidies to the means of production for agriculture were liquidated and demand for agri-food products decreased. Consequently, in 1990 the prices of agricultural products increased by ca. 5 times (against the last year), while the prices of purchased goods and services by as much as 13 times. Credit conditions deteriorated. Interest rate on credits increased ca. 10 times and the payback period was shortened. What is worse, it was permitted for the law to be retroactive which caused enormous financial difficulties for farms largely benefiting from credits, mainly of larger farms of natural persons and state-owned farms.

The economic links between the agricultural producers and recipients of ready products started to wane.

In 1991, the above-described conditions were somewhat watered down, but they were still very unfavourable to agriculture. Only from 1992 onwards, a new set of conditions started to set in, and it lasted until 1996. The new conditions may be characterised as follows:

- prices of a significant part of domestic agricultural products were approximated to the global prices and in some cases they even exceeded the latter;
- there were still considerable fluctuations in prices of agricultural products year-on-year, which maintained the high level of farming risk; as of 1995 this was partly mitigated by a system of preferential credits;
- the price relations between agricultural products and purchased means of production calculated as a multiannual average did not deteriorate although in individual years the situation diverged from the average;
- the high unemployment rate on rural areas hindered taking up employment by rural population outside of their farms, which limited, e.g. supply of land in trade between neighbours and, consequently, rate of changes in the agrarian structure and thus efficiency of farms; property left after liquidated state-owned farms only partly mitigated the phenomenon;
- progressing development of infrastructure on rural areas formed grounds to initiate economic development and mitigate the phenomenon of unemployment.

The year 1997, brought about another change in conditions. The climate for agriculture deteriorated and the phenomenon intensified in 1998. The level of

budget support was low. As compared to the European Union countries, the protection of our agriculture by the state (as assessed by the PSE indices) was lower by ca. 50%.

Adjustment processes in food industry had a slightly different course. In 1989-1992, violent processes of adjustment of the processing sector to the market economy conditions were set into motion. Three phenomena were typical for the period: rapid development of local processing, marked production reduction in industrial companies, and a global decrease in processing in branches where after realignment of prices there was a reduction in the national demand or increase in self-supply.

Local processing development progressed along three tracks:

- by increasing production in food trade which only after abolition of restrictions in access to raw materials, credits, and outlet markets was able to tap its potential;
- as a result of rapid privatisation of cooperative and agricultural processing plants;
- by private investments in construction of processing plants, mainly small and medium-sized ones.

A dense network of small agri-food processing plants, whose number doubled (to over 30 thousand), was created over 2-3 years. These mainly developed in slaughtering and meat processing (inclusive of poultry), in baking industry and milling of cereals, and production of beverages, fishery products, and fruit and vegetable products. Moreover, small pasta plants, oil mills, processing plants for potatoes and food concentrates appeared on the market. They failed to improve the technical standard of processing since their development progressed alongside relatively low capital expenditures and with the use of domestic and used technological lines. Only a small part of processing plants built at that time were equipped in up-to-date technological devices. Most of these did not represent the standard ensuring competitiveness in a developed market economy, but in the first stage of transformations they contributed to the development of competitiveness, posed a threat to state-owned companies and helped to rapidly extend the range of products.

Back then, local processing took over ca. 20% of production of industrial companies and increased its share in food processing to ca. 25-30%. It also attained a significant position both in semi-manufactured goods (slaughtering, milling), and also in production of processed products (meat, fish, pastries, beverages, etc.).

In the first stage of transformations, there was a significant decrease in the food industry production. Its value in fixed prices decreased by 29.5%. This phenomenon occurred in almost all sectors of processing of semi-manufactured goods and manufacture of standard products. The range of the drops was as follows:

- by ca. 50% of industrial slaughtering, production of industrial tobacco, milling of cereals, production of cottage cheese, jams and marmalades, vegetable preserves and industrial feeds;

- by ca. 40% of milk processing, production of spirit, butter, sweets and meal, dehydrated potatoes;
- by ca. 30% of processing of rapeseed, production of pastries;
- by ca. 15-25% of production of cold cuts, meat preserves, sugar, ripened cheese, pasta, vodka, wine and dinner concentrates.

At that period, upward trends occurred only in production of frozen foods, and fruit and vegetable beverages, confectionary, poultry products and beer.

Development of local processing and decrease in the food industry production means that, at the first stage of transformations, this sector was characterised by fragmentation of processing and weakening of the industrial part. At the same time, there was a slight decrease in the mass of processed products because:

- the role of self-supply extended (from 18.2% to 20.5% of the final output of agriculture);
- there was a decrease in demand for products whose high consumption resulted from low food prices and subsidies to the prices (cottage cheese, drinking milk, groats, pastries, etc.).

A global reduction in food processing amounted to slightly above 10% and hence was threefold lower than the decrease in the food industry production. The phenomenon of decrease in processing occurred, primarily, in the processing of milk and cereals, and also sugar beets and rapeseed.

As far as, at the first stage of transformations, there were no significant changes in the industrial part of processing, the next years marked a period of far-reaching reconstruction of the structures and working method of the food industry. Thus, the 1993-1998 period was characterised by:

- return of tendencies to industrialise agri-food processing;
- deepening of food processing;
- accelerated modernisation of the production potential of the sector;
- rapid and differentiated privatisation of state-owned enterprises;
- return of concentration tendencies;
- development of vertical integration and modern management systems.

The tendency to scatter agri-food processing, noted at the first stage of transformations, was not permanent. As of 1993, the food industry production in fixed prices increased at a rate of ca. 10% per year. In 1998, it was higher by over 80% than in 1992. It also exceeded the record 1988 production level by 25%. In recent years, the food industry developed independently from the level of agricultural production (which was relatively stable, at that time) and four-times faster than the pace of growth in raw materials supply. The increase in industrial food processing only partly followed from an increase in the volume of its processing and mainly from structural changes of the sector improving competitiveness.

Industrial companies earlier won the competition with local plants in such branches as: poultry slaughtering, production of beverages and juices, production of cold cuts and poultry products, industrial feeds, pastas, dairy products and other highly-processed products. Local plants still played a considerable

role in industrial slaughtering, milling of cereals, production of pastries, cakes, ready-to-cook foods and some part of traditional fruit and vegetable products.

The economic conditions of agriculture development were shaped under the influence of changes in the income of the population and changes in the structure of demand. As a result of subjecting Poland to shock therapy (strict fiscal, monetary and income policy), the income of the population decreased. In 1989-1992, the real income per capita dropped for farms of people employed outside of agriculture by 27%, for farms of people employed outside of agriculture and farmers by 37%, for farms of farmers by 47%, and for farms of pensioners by 13%.

The state budget stopped subsidising food for consumers and means of production for agriculture. In 1988, subsidies to food constituted over 40% of the total subsidies and 17% of the total current expenditure of the state budget. In 1990, their share decreased to ca. 5% of the total subsidies, whose overall sum also dropped to ca. 1% of total current expenditure of the state budget. In 1992, subsidies to food covered only funding of meals in milk bars. Elimination of the subsidies caused an increase in food prices.

At that time, the prices of such consumption elements as rent and energy also increased significantly. A change in the price relations of consumption articles caused a significant change in the structure of household expenditures. Household expenditures on foods (excluding stimulants) dropped from 38% in 1986 to ca. 32.5% in 1997. Since the transformation the structure of food consumption also changed. At the time of the transformation, there was an increase in the consumption of fruit, vegetables, vegetable fats, bread and other cereal products, and recently also cheese, but the consumption of meat, milk, butter and eggs decreased. The consumption of potatoes and sugar is relatively stable. There is a clear drive at differentiation of consumed food products and a simultaneous increase in the consumption of processed products and quality requirements.

The economic conditions of food manufacturing also changed. Subsidies to the prices of energy carriers and subsidies to means of production were considerably reduced. In 1987-1989, the share of subsidies in the value of sold production of enterprises manufacturing for supply of agriculture amounted to 33%, in 1990 they decreased to 9% and in the next year they were liquidated. The only exceptions are subsidies stimulating biological progress in agriculture and subsidies to agricultural lime. These decisions caused an increase in the prices of means of production. It was impossible to compensate for the increase in costs of manufacturing in agriculture following therefrom, given the decrease in the real income of the population. Preferential working capital credits had little impact on the economic availability of the means of production.

As a result, the profitability of almost all production branches greatly deteriorated thereby also deteriorating the overall economic situation of farms. Thus, the intensity level of agricultural production decreased through a decrease in production and capital expenditures. New market situation, manifested in the surplus of supply over demand, did not follow from an increase in agricultural

production but it resulted from a decrease in demand for food caused by lower purchasing power of the population and import growth. Global output of agriculture in 1997 was lower than its volume in 1990 by 7.1%, including plant production by 11.6% and animal production by ca. 7% (Table 2).

Table 2

Dynamics of global and commercial agricultural output (fixed prices)

Specification	1991	1992	1993	1994	1995	1996	1997	1998
				Last year =100				
Global output	98.4	87.3	106.8	90.7	110.7	101.1	100.0	102.0
Commercial output	96.2	93.1	99.8	90.3	109.3	105.7	106.2	104.0

Source: Rocznik Statystyczny 1997. GUS, Warsaw 1997.

There was a real decrease in prices of agricultural products. In 1997, the prices of global agricultural output were by 467% higher than in 1990, inflation amounted to 667%. The growth rate of prices of products bought by farmers was also much faster than for sold agricultural products (1997:1990 ratio was 86%). The deepest price changes took place in the first two years of the political transformations when the buying-in prices increased by almost 5 times and the price of means of production increased by over 13 times.

This had numerous causes: considerable domestic output, significant increase in food import and a plunge in the purchasing power of money. As a result, supply of agricultural products by far exceeded demand. In 1992-1995, the price relations were in general favourable to agriculture, mainly due to crop failure in 1992 and 1994. Consequently, it was difficult for the supply of agricultural products to offset the demand for food which caused a favourable dynamics of prices of these products (115.0% in 1992 and 108.6% in 1994).

Table 3

Dynamics of the prices of food products at the background of the inflation rate (average monthly indices)

Years	Inflation rate	Retail food prices	Buying-in prices of the 6 main agricultural products
1990/1991	5.06	3.68	1.66
1991/1992	2.93	2.43	4.15
1992/1993	2.67	2.75	2.61
1993/1994	2.43	2.54	2.83
1994/1995	2.28	2.43	1.96
1995/1996	1.68	1.47	1.92
1990/1996	2.84	2.55	2.52

Source: Data from the GUS.

In 1996-1997, the price relations reversed and once again were unfavourable to agriculture. Starting from 1990, food becomes relatively less expensive and retail food prices have relatively higher dynamics than the buying-in prices of the main agricultural products (Table 3). The same conclusions may be drawn from a comparison of the dynamics of food prices against the dynamics of the inflation rate.

Changes in the character of food market and emergence of oversupply as a permanent phenomenon caused an evolution of the meaning of individual links in the very agribusiness. From the moment when sales and not production became the problem, the importance of links having a direct contact with the final consumer increased.

Considering the adjustment processes on a micro scale, it can be concluded that farmers themselves are cumulatively maladjusted to the new system and the environment of agriculture is maladjusted to the new needs of agriculture. The cost of the maladjustment was incurred mainly by agriculture. Maladjustment inside agriculture itself (technological maladjustment) resulted from a faulty area structure and overinvestment, especially in the face of small scale of production, which caused high unit costs and inefficiency of attempts at their reduction. Maladjustment was also caused by socio-psychological factors. External maladjustment followed primarily from sharp price changes, spontaneous activity of market forces, crisis of market structures, financial and credit policy, lack of external protection of the domestic agriculture, etc.

Under the conditions of market economy, one of the most important factors influencing the differences in income is entrepreneurship of a farmer, his activity and skills. Entrepreneurship of a farmer is increasingly more important along with an increase in productive resources of a farm. Results of a German research show that the level of a farmer's entrepreneurship influences, in 40%, the differentiation in income of farms, and ca. 30% of the differentiation may be explained with differences in the level of equipping a farm in labour force, land and buildings.

Research confirms the dilemma facing the farmers. On the one hand, they have to tackle the barrier of low effectiveness, which is required by more and more fierce competition and the need to meet growing quality standards; on the other, these requirements are more and more difficult to be met by the majority of farmers.

The shock changes failed to bring a pronounced short-term change in the behaviours of farmers. But they gave raise to two extreme attitudes towards transformation: active, and an attitude of waiting out and voluntary passivity. A complete dissimilarity of mechanisms that worked in the past and shaped a specific culture of economic behaviours predestined the impossibility to predict the adaptive capacity of individual entities to the new conditions.

It is impossible to assess the scale of a collapse, which took place in the first half of the 1990s, without reference to the years directly preceding the period. The second half of the 1980s was not too favourable to agriculture. These were the years of already intensifying crisis manifesting also in investments.

The period of food sector adjustment to the accession

The production and economic situation was not improved at the turn of the century, when the production and economic situation in the Polish economy, including in agriculture was linked to a slowdown in the global economy. The achieved production and economic equilibrium failed to provide satisfactory income to four-fifths of families connected to agriculture. Thus, it is not surprising that farmers and rural residents were seriously concerned about the accession. The concerns of farmers were grounded in economic and social conditions. The economic situation of the Polish agriculture was difficult.

The events were made even more dramatic by the proposals of the Commission. There was a clear disparity between rights and obligations. Candidate countries had to accept all obligations in the field of agriculture resulting from *acquis communautaire* upon the day of becoming members of the EU. Whereas full rights were to be given to them only after a ten-year transitional period. Such a long transitional period under the proposed conditions posed, according to several opinions, a real threat to the competitive capacities of many Polish commercial farms, including in particular the economically strong ones.

The supporters of integration emphasised the high probability of accelerating economic growth. Economic growth causing increase and change in the demand for food preconditions long-term sustainable development of agriculture and the entire food sector. Poland's membership in the European Union was, undoubtedly, a factor speeding up the economic growth of new members, including also Poland. In 2003-2013, the growth rate of GDP allowed to speed up development of the domestic consumption and investment demand, and also demand of exporters. Within that period they increased in total by: individual consumption by 22.5%, investments by 66%, and export of goods by 141%, respectively. These are indicators of economic growth resulting in an increase in domestic demand for food (by 14%) and very significant boosting of the trade in agri-food products, whose turnover increased threefold. Rapid economic growth and growth in income of the population contributed to the improvement in the quality of nutrition, i.e. improvement in the structure of food consumption and its greater provision with processing and commercial services.

The analyses of potential benefits and losses linked to integration processes emphasise the fact that Common Agricultural Policy ensures stable production conditions to producers in the long run. For the Polish farmers, at risk of frequent changes in the agricultural policy, the consequences of changes in the business climate on the agricultural market and ensuring stable production conditions was to be, according to many opinions, an achievement equally important as the financial assistance.

On the part of benefits, financial benefits connected to the accession were primarily highlighted. As it seems, the amount of financial resources was a conclusive argument for undecided farmers to vote for the membership in the EU in a referendum. After Poland's accession to the EU, already in 2004-2006, we were to obtain ca. EUR 20 billion for different types of Community policies.

The agricultural sector in the period of Poland's membership was supported from the EU-27 budget with the amount of nearly EUR 30 billion (over PLN 120 billion) (Table 4).

Public opinion polls show that after ten years of membership, over 60% of farmers accepts the membership in the EU. An attempt at a thorough assessment of the macroeconomic effects of Poland's membership in the EU is more complicated.

Table 4

The amount of CAP funds transferred to Poland (data in EUR)

Year	Direct payments	RDP	Market interventions	Other CAP transfers	Total
2004	0	286,640,000	10,786,208	0	297,428,212
2005	702,674,035	662,100,658	166,668,009	10,638,946	1,542,083,653
2006	811,580,923	1,149,555,478	181,896,135	11,100,858	2,154,135,400
2007	935,100,872	1,550,886,535	62,431,005	5,264,141	2,553,684,560
2008	1,037,600,783	846,530,427	134,629,217	12,400,573	2,031,163,008
2009	1,446,164,527	1,043,825,682	409,081,057	14,860,428	2,913,933,703
2010	1,827,719,773	1,571,940,488	66,374,780	12,586,168	3,478,623,219
2011	2,395,415,615	1,706,015,707	142,161,865	11,632,309	4,255,227,507
2012	2,702,781,649	2,024,767,952	129,330,008	11,376,612	4,868,258,233
2013	3,065,995,810	96,830,252	1,695,969,389	24,234,865	4,883,032,330
2004-2013	14,925,033,987	10,939,093,179	2,999,327,673	114,094,900	28,977,549,740

Source: Data from the Eurostat.

Ten years of Poland's membership in the EU

In 2013, over 15.2 million ha of UAA, in Poland, was used by farms having more than 1 ha of UAA¹, including most of them (94.7%, i.e. 14.4 million ha) in good agricultural and environmental condition, which accounted for ca. 9% of all such UAA that are at the disposal of agriculture in the EU-27. However, these were lands of relatively low quality as regards the conducted agricultural activity.

According to the experts from Institute of Soil Science and Plant Cultivation [Polish: Instytut Uprawy Nawożenia i Gleboznawstwa, IUNG], given the entire scope of nature and climate relations, the agricultural production conditions in Poland are by 25-30% worse than in western European countries.

¹ UAA in Poland accounted for ca. 8.8% of the area of agricultural land of the EU-27. A higher share of agricultural land was noted in: France (16.1%), Spain (13.6%), the United Kingdom (9.6%) and Germany (9.3%).

In the last decade, concentration processes in the Polish agriculture were more and more pronounced and after Poland's accession to the EU these strengthened even more. In 2002-2013, the average area of all farms of more than 1 ha of UAA in Poland increased by 15.6%. Over 80% of the growth was noted in 2003-2013.

The scale of productivity-oriented structural transformations is best illustrated with the changes in the group of farms with opportunities for development and facing the competition, which in Poland are recognised as farms of 30 ha or more. In 2002-2013, their share in the total number of farms of more than 1 ha of UAA in acreage increased from 6 to 9%, and the area of land at their disposal – from 26.5% in 2002 to 44.3% in 2013.

In 2013, the group making a labour input to agricultural activity conducted by individual farms and not receiving remuneration for the input totalled 3,669.4 thousand people², at the same time, this was a group by 8.9% smaller than 10 years before³. By expressing their work in the full-time equivalent, i.e. full-time employment⁴, this group decreased from 2,044.7 to 1,769.9, i.e. by 13.4% in 2003-2013.

Empirical research carried out by the Institute shows an increase in the number of people from families using a farm of more than 1 ha of UAA and working exclusively outside of agriculture. In 2013, their number was estimated at ca. 460 thousand people, while in 2003 it was ca. 305 thousand.

The agrarian fragmentation, continuing despite the favourable trends, results from former development gaps whose narrowing is independent from changes in the agricultural sector. Further progress in diversification of professional activity of people from families using an individual farm is largely outside of agriculture. Preparation to work in non-agricultural sectors regularly improves, which is evidenced by changes in the general educational attainment of the population aged 15 and more in families using an individual farm⁵. In 2003-2013, there was a progress in the number of graduates of secondary and post-secondary schools (from 18 to 34%), and higher schools (from 3 to 13%). Moreover, at that time the share of people that had non-agricultural school qualifications increased from 44 to 57%.

² All data for 2013 were developed on the basis of the results of the Agricultural Census 2002 and 2011 [Polish: Powszechny Spis Rolny, PSR], results of a representative research on the structure of farms conducted by the GUS in 2005 and 2007, and panel field research carried out by the Institute of Agricultural and Food Economics – National Research Institute [Instytut Ekonomiki Rolnictwa i Gospodarki Żywnościowej – Państwowy Instytut Badawczy, IERiGŻ-PIB] in 2005 and 2011.

³ The information given for 2003 were developed based on the results of PSR 2002, results of a representative research on the structure of farms conducted by the GUS in 2005, and panel field research carried out by the IERiGŻ-PIB in 2000 and 2005.

⁴ This means that one person works at a farm for 2,120 hours in a year, i.e. that person worked during a year for 265 working days for 8 hours a day. An equivalent of full-time employment calculated in that manner represents a work unit, which is abbreviated to AWU, and for members of an agricultural family it is FWU.

⁵ Changes in the educational attainment were determined on the basis of the National Census of Population and Housing of 2002 and 2011 [Spis ludności i mieszkań], and panel field research carried out by the IERiGŻ-PIB in 2000, 2005 and 2011.

It is estimated that in 1999, from 83 to 139 thousand farms (5.2-8.7% of the total) increased the value of their fixed assets. Whereas in 2013, this was characteristic of 290-300 thousand farms (ca. 17% of the total) that generated ca. 69% of the national value of agricultural production.

Technologies applied in agricultural production also underwent a positive change. In 2002-2010, there was an increase in the share of farms owning: tractors from 35.9 to 44.6%; combine harvesters from 4 to 6.5%; and sprayers from 15.8 to 21.5%.

Changes were also noted in the livestock population as counted both by physical units and livestock units. In contrast to periods earlier than 2002, the livestock population in livestock units (LU) increased and in 2013 it was by 38% higher than eight years earlier. In 2012, stocking density per 100 ha of UAA was 67.4 LU, while in 2002 it was 45 LU. Increase in the livestock population was favourable as it contributed to an improvement in the level of fertilisation with natural fertilisers. The inputs of chemical plant protection products and mineral fertilisers also increased recently which means a continuing increase in intensity of plant production. In 2013, the consumption of mineral fertilisers per kilograms of NPK amounted to ca. 130% of the 2000 level, and a similar indicator for chemical plant protection products was 217%.

Increase in intensity of plant production was accompanied by an increase in yields of arable crops. Only in 2004-2013, the yields of rapeseed and agrimony grew by ca. 48%, sugar beets by ca. 37%, wheat by 21%, and fodder legumes for seeds by 15%.

A growth in the unit productivity of animals has also been noted in animal production. The average annual rate of milk yield increase totalled nearly 82 litres per cow throughout the period, and the production of live pigs per standard livestock unit grew at an average annual rate of ca. 2 kg. Consequently, the average annual milk yield from 1 cow, in 2013, amounted to 4,978.1 and production of live pigs in live weight – 142.5 kg per 1 ha of UAA. This resulted from genetic progress in rearing of livestock, change in their feeding, improved quality of own and purchased fodder.

It should be emphasised that in 2004-2013, the volume of agricultural production grew. According to the Central Statistical Office [Główny Urząd Miar, GUS] data, the value of the global output of the Polish agriculture in current prices was PLN 100,671.7 million in 2013. Calculated in fixed prices, it was by 16.2% higher than in 2000 and by 9.8% as compared to 2005. Thus, the annual average increase in the value of production in 2005-2013 amounted to 1.63%, while in 2000-2010 it was 1.47%.

Poland produces ca. 12.7 million tonnes of milk and is the fourth producer in the EU. The production is stable as the growing milk yield offsets for the drop in the livestock population. More and more often milk is processed into products of high value added (ripening cheeses, yoghurts, etc.). The net export of dairy products is ca. 1.3 million tonnes per milk and its value is EUR 950 million. Poland became a major exporter of cheese exporting ca. 185 thousand tonnes.

Poland is the third largest producer of sugar in the EU. The productive potential of the sector after restructuring decreased slightly to ca. 1,900 thousand tonnes, but it greatly exceeds the internal market demand, namely 1,600 thousand tonnes. A decrease in the area of sugar beet cultivation to 185 thousand ha was offset by an increase in yields to 630 dt/ha. Modernisation of the sugar industry and its raw materials base influenced the productivity and processing of sugar beets. The industry is a net exporter of ca. 200-300 thousand tonnes.

From the beginning of the 21st century, poultry production in Poland increased threefold to ca. 1,600 thousand tonnes. The consumption increased by over twofold to more than 26 kg per capita annually, i.e. 37% of the total meat consumption. Export is by as much as eleven times higher than in 2000, and it exceeds 530 thousand tonnes, which is 33% of production. At present, Poland is the fourth largest poultry meat producer in the EU and it is the third largest exporter of the meat. In 2013, the value of the export amounted to ca. EUR 1.2 billion. We are winning new outlet markets in Asia and Africa.

Poland is the third largest producer of cereals in the EU. In the last decade, the average yields amounted to 27 million tonnes. But this volume changed because of random factors ranging from 21.7 to 29.7 million tonnes. For many years, Poland has been a net importer of cereals and, basically, except for isolated years, it still is. But after accession to the EU this situation will start to change. Before accession, Poland exported small amounts of cereals, and larger only in the years of good crops. At the same time, import also fluctuated depending on the market situation. Whereas after accession to the EU, regardless of the level of crops, Poland exports at least 1 million tonnes per season, and frequently over 2 million tonnes (reaching a record level of 4.5 million tonnes in the 2012/13 season). Import stabilised within the limits of 1.5-2.5 million tonnes.

Poland is one of the largest producers, processors and exporters of rapeseed in Europe. It produces over 2 million tonnes, which represents 11% share in rapeseed production; giving Poland, along with the United Kingdom, the third place in the EU. Poland lost the position of a significant rapeseed producer and exporter in the 1990s, and reclaimed it after accession to the EU. The EU policy regarding biofuels gave a strong impulse for development of the crop. In 2004-2013, yields increased from 1 million tonne in 2000-03 to 2.1 million tonnes in the last five years. Rapeseed production became one of the fastest developing sectors of plant production. Given an increase in production and slowly growing domestic demand for rapeseed oil, Poland became an important rapeseed exporter. The export of rapeseed oil develops, and export of rapeseed cake and margarines increases. In 2004-2013, the value of oilseeds export increased six times and their import four times. Despite export development Poland, just like the entire EU, continues to be a permanent net importer of oilseeds and negative balance of trade deepens. This follows from limited development possibilities of oilseeds production with dynamically growing domestic demand for biofuels and protein fodder.

Poland is the fourth largest – after Spain, Italy and France – producer of fresh horticultural products among the countries of the enlarged Community. Poland is the largest, in the EU, producer of: apples, cherries, currants, gooseberries, raspberries and cabbage, carrot and red beets, and the second largest producer of strawberries, cucumbers and onion in the Community. What also increases, is the share of other vegetables, less important to domestic output, such as: broccoli, cucurbits, leek and salad plants. The share of Poland is still below 5% of the EU yields of these vegetables.

The share of Poland in the EU production of apple juice concentrate, under stable production, remains unchanged and ranges from 45 to 50%. With the share exceeding 50%, Poland is the leading EU producer of frozen fruit (strawberries, cherries, raspberries, currants, gooseberries, plums) and juice concentrates from soft fruit. Already in the second year of membership in the EU Poland became the largest, after Belgium, producer of frozen vegetables in the Community. Noting small changes in the share in the EU production, Poland is also the largest in the Community and one of the largest in Europe producer of sauerkraut, pickled cucumbers and dried carrot. In the total output of products processed from fruit and vegetables in the EU, the share of Poland increased from ca. 5% before the accession to an average of ca. 10% in 2010-2012.

After accession, Poland strengthened its position of the largest, among the Community countries, supplier of juice concentrates, frozen fruit and soft fruit for processing (mainly strawberries, cherries, raspberries and currants) and the second, after Belgium, largest supplier of frozen vegetables to the EU market.

Poland is the largest worldwide producer of currants and gooseberries, and recently also raspberries. We are ranked fourth in the world in the production of apples, and fifth in strawberries, cherries and carrots. Poland is the second worldwide (after China) producer of apple juice concentrate, and the third worldwide (after the USA and China) producer of frozen fruit and juice concentrates made from soft fruit. We are among the largest five producers of frozen vegetables in the world. Poland is the largest in the world exporter of frozen fruit, juice concentrates from soft fruit and the second largest exporter of apple juice concentrate. Recently, we became the second (after China) largest exporter of apples (in the 2012/13 season the export of the fruit from Poland exceeded their export from China).

Income situation of agriculture

Support to agriculture with public funds (the EU and national) contributed to the improvement of the income situation of the Polish farmers, mainly due to direct payments. The support provided to farms on the LFAs was beneficial for both farmers and the environment. The impact of “agri-environmental projects” should also be recognised as positive with its major impact falling to measures to protect water and soils. Whereas the impact of “early retirement”, afforestation programme and the programme of adjustments to the European Union standards and, above all, the programme of support for semi-subsistence farms was recognised as insignificant.

Agricultural income is characterised by high diversity. This diversity is directly linked to fluctuations in the prices of products and means of production and the production volume. In the face of progressing integration of agricultural markets, the noted fluctuations in the prices of agricultural products are attributed to the changes in the production volume on the global market. Consequently, an increase in prices paid to agricultural producers on the local market is possible, which would be accompanied by an increase in the volume of the national agricultural production. In such a case, a surge in agricultural income is observed. On the contrary, a plunge in global and local prices in case of a decrease in the volume of domestic output leads to a violent deterioration of the income situation of farmers.

Fluctuations in agricultural income, especially in the second of the discussed cases, are balanced by means of direct payments. These payments may be of long-term character – planned, as well as *ad hoc* income support. The first type of support may raise concerns under the conditions of agricultural income growth resulting from simultaneous improvement in the conditions of trade and volume of agricultural production. In such circumstances, the support is an additional factor contributing to an increase in the amplitude of fluctuations in agricultural incomes.

After accession to the European Union, the growth dynamics of income for households of farmers was higher than in the remaining socio-economic groups. In 2004-2013, the nominal income at the disposal of farmers increased by 89.7% (real income by 64.3%) and in the remaining groups of farms as follows: in total by 62.2% (38.7%), employees by 61.5% (39.3%), self-employed (entrepreneurs) by 57.0% (37.2%), pensioners by 51.5% (26.2%). In the accession period, factors favouring an increase in the agricultural income were predominant; a significant position among them belongs to various forms of financial support under the CAP, which are targeted at the agri-food sector, farms of farmers and rural areas.

Integration of Poland with the EU halted the downward trend in the share of income from agriculture in the total income. In 2004-2013, the share of income from agriculture increased in the total disposable income by 5.4 percentage points, and the share of income from paid employment by 2.6 percentage points; while the share of income from social and welfare benefits decreased by 6.0 percentage points, and from self-employment by 0.8 percentage point (Budżety gospodarstw...).

The gap between income from agriculture in Poland and the EU-27 also narrowed, but the differences are still significant (Figure 1).

Surveys of household budgets point to a slow process of eliminating income disparities between rural and urban residents. In 2004-2009, the advantage of income of the urban population against the rural population decreased from 51.4% to 41.1%; similarly: in cities of 20 thousand inhabitants and less – from 24.6% to 16.0%, and in cities of 500 thousand and more – from 105.7% to 95.1% (Wyniki badań...). These changes were influenced by a higher growth in income of the rural residents (growth by 58.8%) against urban residents (growth by 48.0%), and almost twofold lower number of long-time unemployed on the rural areas,

i.e. people seeking job for longer than 12 months. Despite a decrease, the high income advantage especially of metropolitan residents over the income of the rural residents continues (Figure 2). This is preconditioned, e.g. by location of the best paid jobs in big cities. Other factors affecting the income disparities between the urban and rural residents include the number of family members and their educational attainment. The rural population has lower level of educational attainment than urban population; moreover, rural areas are inhabited by a greater share of families with multiple children than urban areas, especially as compared to big agglomerations.

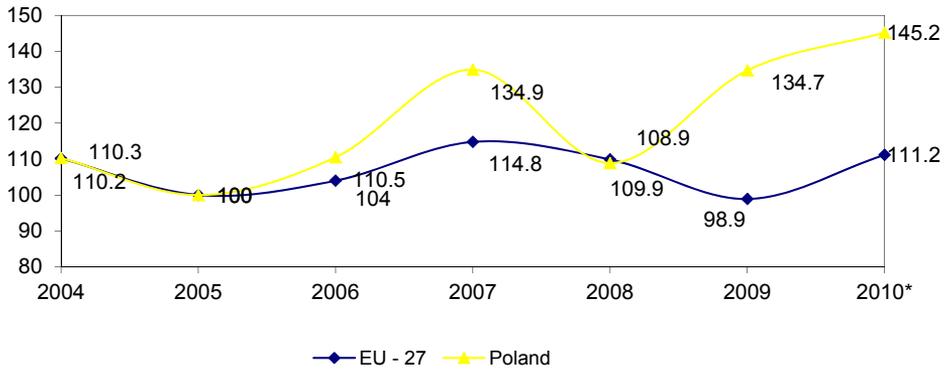


Fig. 1. Dynamics of income from means of production per full-time employee in agriculture in fixed prices (2005=100)

Source: Eurostat, Economic Accounts for Agriculture.

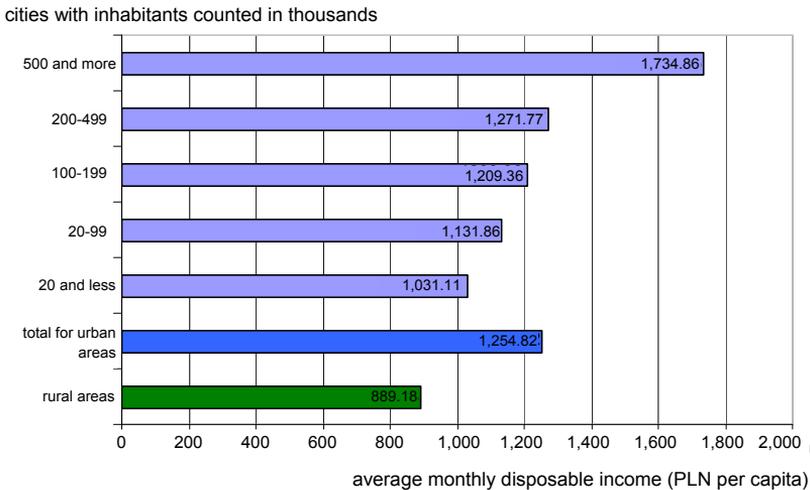


Fig. 2. The level of disposable income of households on rural and urban areas

Source: Own elaboration on the basis of the results of the survey of household budgets held by the GUS.

In 2013, households of farmers noted further reduction in the risk of economic poverty, including extreme poverty. In 2004-2013, households of farmers noted a decrease in the share of people below: the minimum subsistence level from 19.9% to 8.9%, relative poverty line from 32.3% to 25.9%, statutory poverty line from 31.6% to 12.1%. As for the statutory poverty line, the share of people spending below this line continually decreases as of 2005. This partly results from the adopted mechanism of establishing the thresholds entitling to use the benefits from the social assistance scheme.

After accessing the European Union, the economic and financial situation of agricultural enterprises, both production and services, was good and stable. In 2004-2013, production enterprises had a sustainable capacity to generate profit at the level of ca. 5-10% of the trade value, and service enterprises – 3-6% (ROE 6-15%); moreover, they continually increased their revenues and labour productivity, achieved better financial liquidity and high investment rate. The indicators of current financial liquidity, ranging from 1.5 to 2.2, even point to free equity in some of these enterprises, and the investment rate above 1.5 means a rapid process of modernisation of fixed assets of agricultural enterprises.

As regards supplying agriculture with means of production, integration resulted primarily in a significant increase in the prices of means of production, goods and services bought by farmers. In 2013, the prices of these products were by 40% higher than in 2000-2002, and by 33% higher than in 2003. In the post-accession period there was a continuous increase in the purchase (and consumption) of mineral fertilisers, plant protection products, industrial fodder and services, while the supply of seed and energy factors was relatively stable. Development of the real demand for current means of production, similar to intermediate consumption, was thus moderate and slightly lower than the increase in agricultural production.

Whereas, there was a clear or even significant increase in the demand for agricultural machinery and other investment goods. The growth in sales of the key agricultural machinery and other investment expenditure was on average twofold in the period. In 2003-2013, the value of investments in agriculture in current prices doubled (from PLN 2.0 to 4.0 billion) and in fixed prices it increased by ca. 38%.

Foreign trade in agri-food products

In the post-war period foreign trade in agri-food products, although minor, was important for the development of the Polish agriculture and the economy as a whole. The character of input-output links in the area underwent considerable changes. For a long time, agriculture and food industry did not have sustainable surpluses of products. Minor quantities of goods were exported to get foreign currencies necessary to develop the economy. Over time such surpluses began to appear, but at once it was more and more difficult to place them on international markets. It is thought that Poland, at times of the real socialism, used foreign trade (to boost economic development) to a lesser extent than possible. We failed to tap the opportunities opened up by foreign contacts. This has many

causes. The first one to mention, is the low international competitiveness of the Polish economy, which encompasses both the low quality of the export offer and its low price competitiveness.

Radical changes in the Polish foreign trade in agri-food products took place at the times of the political transformation and then Poland's membership in the European Union. Faster growth of export than import caused a fundamental change in the foreign trade balance sheet of the agri-food sector.

At the beginning of the socio-economic transformation, Polish economy, including the agri-food sector, started to look for a new place for itself on the global markets. Exceptional opening of the Polish economy came in place of advanced isolation, which involved strategic changes. The economy, including the agri-food sector was one-sidedly opened to the world. This primarily meant opening of import. Export opportunities failed to keep up. The Polish agri-food sector was responsive to import of high quality food and technologies for agri-food processing, at the same time, it did not have sufficiently attractive (in terms of quality and cost) export offer. Import growth was not as much of a problem as providing support to the domestic output by import, given its insufficient competitiveness.

The European Union countries and other major exporters conducted and still conduct a policy of protecting their own agriculture against external competition. According to many opinions, Poland failed to protect its food sector enough, because of which increasingly larger enclaves of individual branch markets were shaped by foreign companies and a strong external competition reduced the range of opportunities available to the Polish producers. In the 1990s, foreign trade underwent liberal transformations to a greater extent than other sectors. Apart from what was brought about by the open market economy, foreign trade in agri-food products was covered by regulations of the Treaty forming a part of the Uruguay Round and WTO (Agreement on Agriculture) that marked the beginning of Poland's introduction into the European Union structures. These Treaty regulations had a greater impact on foreign trade than the market instruments. As a result of the regulations the system was a market-oriented one, but it was not a free one. It had many features of a protectionist system. In the beginning of the 1990s, the solutions applied in Poland were more liberal than those in the European Union countries.

This caused a continuously negative foreign trade balance throughout the whole last decade of the past century up to 2003. At the end of the last decade, the value of export barely exceeded USD 3.0 billion, and the value of import – USD 3.5 billion. The negative balance ranged between USD 400 and USD 1,000. The trade coverage index amounted to ca. 70%. The geography of the Polish export changed considerably. The export of agri-food goods to the EU and CEFTA countries increased, while export to the former USSR countries, including especially Russia – decreased. The changes in the geographical structure of the Polish trade, in particular agri-food export was marked by changes in its material structure. The share of animal products in the export decreased – especially dairy and meat products, while the share of non-processed plant products increased, including in

particular horticultural products. The share of animal products, in particular dairy products, increased in the import of agri-food products.

The following should be noted when summing up the experiences of the past decade (1990-2000):

Firstly, opening up of the agri-food sector to the world proved to be one-sided – the import side. The Polish market absorbed high quality imported products very well, especially from outside of our climate zone. Export, on the other hand, had to face serious external competition.

Secondly, this period was marked by structural aggregation of the negative balance of foreign trade in agri-food products, but the deficit proved to be less dangerous for the economy than it used to be under the planned economy.

Thirdly, the competitive strength of the Polish agriculture on international markets weakened. This was caused by the following: (1) keeping the zloty devaluation rate below the inflation rate by the central bank; (2) more stringent quality and hygiene requirements, (3) aggravation of the Russian crisis, as a result of which Polish exporters were crowded out from their former Eastern markets by the USA and the EU exporters benefiting from high export subsidies.

Fourthly, the Polish food sector acting under open economy needed protection. This was achieved through customs duties and market access quotas. The Polish producers did not have access to the export subsidies, which in most of the countries are a “standard” export-forming instrument. Indirect subsidies were also relatively low in Poland, which was evidenced by low rates of the PSE (Producer Support Estimate).

Fifthly, the export volume of agri-food products increased by ca. 40% while import volume by ca. 80%. Thus the Polish food sector opened up more to the world. This failed to strengthen its position in the overall foreign trade and the national economy, though. Contrary, the position weakened.

The situation started to change from the beginning of the century. There was a very rapid increase in the trade turnover as of 2003 onwards, along with a faster liberalisation of trade with the European Union. The signing of the “double zero agreement” with the EU in 2002, which expanded access of the Polish exporters to the single European market, caused an increase in the average growth rate in the export value, primarily due to the export growth to the Member States.

Contrary to earlier concerns following from outdated production structures of the Polish agriculture, technology gap in the food industry, poorly developed market structures, lack of branded products and low level of marketing and promotion activities, it turned out that the progress achieved in the period of preparations to the integration with the EU⁶ allowed to use comparative advantages upon opening the EU market and in later years. Previously the access was restricted by the EU trade policy, which successfully protected the internal mar-

⁶ Adjustment processes preconditioned by food economy conditions (including privatisation processes with the share of foreign capital) and high requirements on standards and quality of the produced food were decisive in this respect. The presence of international sales networks on the Polish market was also important as they have well-developed distribution channels in all Member States.

ket through high (often prohibitive) tariff barriers and preferential access was strictly limited⁷. Poland transformed from a net importer, which it has been since 2002, into an increasingly more important net exporter of food. In 2000-2013, the export value increased by nearly sevenfold and import by over fourfold. As a result, trade surplus in food trade was nearly EUR 6 billion (Figure 3) in 2013.

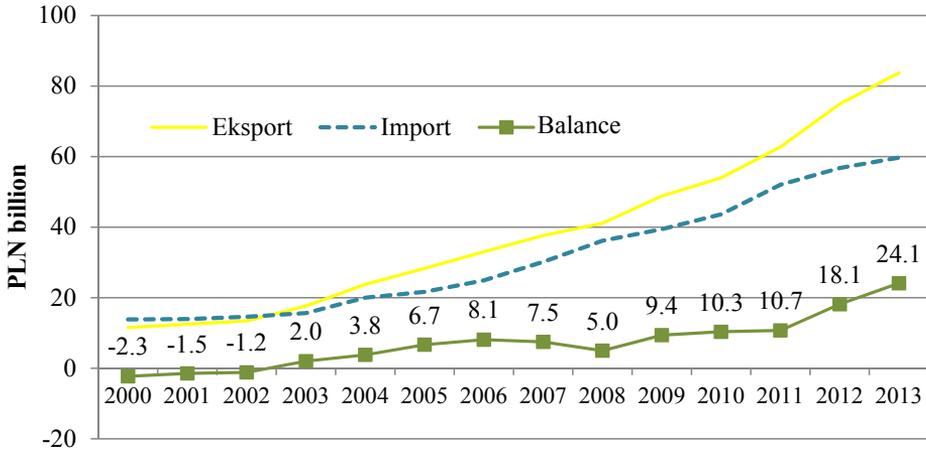


Fig. 3. Polish foreign trade in agri-food products (PLN billion)

Source: own compilation based on data of the Analytical Centre of Customs Administration [Centrum Analityczne Administracji Celnej, CAAC].

What proved true, were the expectations of some economists (primarily the authors of the shock therapy), who claimed that only a process of forcing efficiency will bring a permanent improvement to the economic situation of the Polish food sector. During the period of Poland's accession to the EU, the exceptionally quick development of food export, resulting from (price and quality) competitiveness of the sector on the single European market, became the most important factor of agri-food sector development in Poland. In 2003-2013, the value of the Polish agri-food export increased from EUR 4,010 million to EUR 19,960 million, i.e. per capita – from EUR 105 to EUR 470. Poland became a serious net food exporter reaching, in 2013, a positive trade turnover balance amounting to EUR 5.7 billion (against EUR 0.454 billion and EUR 0.836 billion in 2003 and 2004, respectively). The Polish food was recognised worldwide and especially on the demanding EU market. The trade coverage index exceeded 140.

⁷ The EU trade policy, which involves a system of customs duties, preferential quotas, export and import licences, and export refunds, constitutes an inherent part of the CAP that aims at stabilisation of the internal market, but upholding preferences for Community products at the same time.

Literature:

1. 5 lat polskiego rolnictwa. Bezpieczeństwo żywnościowe w Europie. Puławy 2014.
2. Analiza produkcyjno-ekonomicznej sytuacji rolnictwa i gospodarki żywnościowej w 2012 roku. Edycja 50 (joint publication ed. by A. Kowalski). IERiGŻ-PIB, Warszawa 2013.
3. Analiza produkcyjno-ekonomicznej sytuacji rolnictwa i gospodarki żywnościowej w 1997 roku. IERiGŻ, Warszawa 1998.
4. Budżety gospodarstw domowych. GUS, Warszawa.
5. Józwiak W.: Polskie rolnictwo i gospodarstwa rolne w pierwszej i drugiej dekadzie XXI wieku. IERiGŻ-PIB, Warszawa 2013.
6. Kowalski A.: The Common Agricultural Policy Towards Global Challenges [in:] NEEFood-2013. National University of Food Technologies, Kyiv, Ukraina 2013.
7. Kulawik J.: Globalizacja a kryzysy. Implikacje dla finansów polskiego rolnictwa [in:] Rozwój sektora rolno-spożywczego na tle tendencji światowych (ed. A. Kowalski, M. Wigier). IERiGŻ-PIB, Warszawa 2008.
8. Powszechny Spis Rolny 2002. GUS, Warszawa.
9. Powszechny Spis Rolny 2011. GUS, Warszawa.
10. Pracujący w Gospodarce Narodowej (respective yearbooks). GUS, Warszawa.
11. Rocznik Statystyczny 1997. GUS, Warszawa 1997.
12. Rocznik Statystyczny RP (respective yearbooks). GUS, Warszawa.
13. Rynek mięsa. Stan i perspektywy. Analizy Rynkowe, nr 47/2014, IERiGŻ-PIB, ANR, Ministerstwo Rolnictwa i Rozwoju Wsi, Warszawa 2014.
14. Rynek mleka. Stan i perspektywy. Analizy Rynkowe, nr 47/2014. IERiGŻ-PIB, ANR, Ministerstwo Rolnictwa i Rozwoju Wsi, Warszawa 2014.
15. Rynek ziemi rolniczej. Stan i perspektywy. Analizy Rynkowe, nr 15. IERiGŻ-PIB, ANR, Ministerstwo Rolnictwa i Rozwoju Wsi, Warszawa 2013.
16. Spis ludności i mieszkań 2002. GUS, Warszawa.
17. Spis ludności i mieszkań 2011. GUS, Warszawa.
18. Szajner P.: Perspektywy eksportu polskich produktów mleczarskich w zmieniających się warunkach. IERiGŻ-PIB, Warszawa 2009.
19. Ślajs J., Doucha T.: Situation in the Czech Agriculture after 9 years of EU accession – a research position to strategic challenges for the future policy after 2013. Zagadnienia Ekonomiki Rolnej, nr 1, 2014.
20. Środki Trwałe w Gospodarce Narodowej (respective yearbooks). GUS, Warszawa.
21. Wyniki badań budżetów gospodarstw domowych. GUS, Warszawa
22. Z badań nad rolnictwem społecznie zrównoważonym (joint publication ed. by J.St. Zegar). IERiGŻ-PIB, Warszawa 2014.