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# IMPACT OF INTEGRATION WITH THE EUROPEAN UNION ON THE POLISH MEAT INDUSTRY

WPŁYW INTEGRACJI Z UNIĄ EUROPEJSKĄ NA POLSKI PRZEMYSŁ MIĘSNY

Key words: meat industry, integration, Poland, European Union

Słowa kluczowe: przemysł mięsny, integracja, Polska, Unia Europejska

Abstract. The past decade, i.e. 2004-2014, was a period of intensive development of the Polish meat industry, in which Poland's accession to the European Union and a possibility of using EU subsidies under the Common Agricultural Policy (CAP) definitely had their share. Thanks to this support, the meat industry in Poland grew much faster than in the EU-15 and was a leader of the EU-12/13. Integration with the EU had a positive impact on accelerating production growth in the Polish meat industry, while several years of adaptation to EU requirements significantly changed the image of Polish meat companies in the Single European Market. The Polish meat industry became a major producer of meat and meat preparations in the European market (in 2014, ranked fifth in the EU) and Polish processing plants are considered among the most advanced in the EU. In the past decade, meat product export was one of the main factors contributing to the development of the meat industry in Poland. Growing domestic demand was the second important factor of production growth. However, greater market diversification is needed (Asian and African countries, the Middle East).

#### Introduction

Poland's integration with the European Union boosted the development of the Polish meat sector. It provided Polish producers of meat and meat preparations with greater opportunities for action, giving free access to the EU market of over 500 million consumers. Additionally, Polish meat producers were given an opportunity to avail themselves of EU funds to support the modernisation of enterprises and their adaptation to operate in the Single European Market (SEM). At the same time, the domestic market was opened up which also entailed certain risks, including increased competition from major EU meat producers and a possible influx of cheaper food.

The meat industry<sup>1</sup> is one of the most important branches of the Polish food industry. In 2004-2014, the value of its marketed production increased more than doubled, from PLN 27.6 billion to PLN 56.4 billion<sup>2</sup>, i.e. by 7.4% per year. Meat industry companies made good use of their comparative advantages in the form of lower agricultural commodity prices and cheaper workforce. Nevertheless, these simple advantages are slowly fading, thus labour productivity and production efficiency in meat industry enterprises need to further increase [Mroczek 2014].

## Material and methods

The aim of this study is to analyse the impact of EU integration on Polish meat industry. The paper is based on statistical data from the Institute of Agricultural and Food Economics – National Research Institute (IAFE-NRI), the Central Statistical Office (CSO), the Ministry of Agriculture and Rural Development (MARD), the Ministry of Finance (MOF), the Agency for Restructuring and Modernisation of Agriculture (ARMA) and the Agricultural Market Agency (AMA). These data were used to analyse the impact of accession on the Polish meat industry after Poland's accession to the EU.

<sup>&</sup>lt;sup>1</sup> The term "meat industry" means both the red meat (pork, beef) industry and the poultry meat industry.

<sup>&</sup>lt;sup>2</sup> At basic prices, i.e. excluding VAT and excise duty.

#### Common Agricultural Policy instruments in view of the meat sector in Poland

The processes of adaptation to EU standards in the Polish meat sector already began in the pre-accession period. Veterinary and sanitary requirements appeared to be most expensive and complicated to implement. In the pre-accession period, EU assistance programmes, i.e. PHARE<sup>3</sup> and SAPARD<sup>4</sup>, allowed for accelerating necessary adaptations and making the Polish meat sector more competitive. In turn, Poland's membership in the European Union enabled meat sector entrepreneurs to benefit from various EU assistance programmes, among others: the Sectoral Operational Programme "Restructuring and Modernisation of the Food Sector and Rural Development 2004-2006" (SOP) and the Rural Development Programme 2007-2013 (RDP 2007-2013) [Tereszczuk 2013]. Moreover, Polish entrepreneurs in this sector were covered by market support mechanisms under the Common Agricultural Policy (CAP). These mechanisms were in particular intervention measures (private storage, exceptional market support measures), export subsidies and support for the consumption of meat and its promotion.

#### Support for investments in the Polish meat sector with public funds

In 2003-2013, under the assistance programmes referred to above, Poland earmarked PLN 1.92 billion<sup>5</sup> to support investments in the meat sector which accounted for approx. 15% of total capital expenditure made then in the meat sector. To have investment activities subsidised, entre-

preneurs had to mobilise their own funds which, in turn, meant that the final value of completed investments was at least twice higher.

SAPARD was the first EU co-funded programme implemented under the pre-accession assistance and supporting, among others, the meat sector. Financial support was provided for projects closely related to adapting processing plants to EU sanitary and veterinary requirements, increasing the added value, improving product quality, introducing new technologies and innovations. Under Measure 1,336 payments of PLN 1,525 million in total were made, of which PLN 782 million (689 payments) went to the meat sector, which accounted for 51.3% of funds under this measure. The average amount of funding per project in the meat industry was approx. PLN 1.13 million. Thanks to SAPARD funds. 300 meat processing plants implemented the HACCP system. In total, 412 meat processing plants carried out the programme of adaptations to EU norms and standards<sup>6</sup>. The number of meat plants authorised to trade with the EU Member States increased several-fold, i.e. from 101 in early 2004 to 1,100 in late 2006.

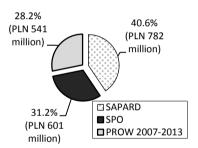


Figure 1.Structure od support for investments in the meat sector in Poland under EU assistance programmes in 2003-2013

Rysunek 1. struktura wsparcie inwestycji w sektorze mięsnym w Polsce z programów pomocowych UE w latach 2003-2013 Source: own elaboration based on unpublished ARMA data Źródło: opracowanie własne na podstawie niepublikowanych danych ARiMR

<sup>&</sup>lt;sup>3</sup> PHARE (Poland and Hungary: Assistance for Restructuring of the Economy) – PHARE assistance covered measures to support agricultural policy instruments, strengthening marketing orientation in the agri-food sector and promoting agricultural trade liberalisation. The scope of implemented projects included: introducing a food safety scheme and good producer practices in the processing industry as well as ISO standards, adapting phytosanitary and veterinary administration, reinforcing veterinary control at the EU's external borders, reinforcing official control of commercial quality of food and establishing a certification scheme.

<sup>&</sup>lt;sup>4</sup> SAPARD (Special Accession Programme for Agriculture and Rural Development) – This programme was an instrument of EU support for candidate countries in the process of structural and adaptation transformations to EU standards in rural areas and agriculture.

<sup>&</sup>lt;sup>5</sup> Including: PLN 0.78 billion – SAPARD, PLN 0.60 billion – SOP, PLN 0.54 billion – RDP 2007-2013.

<sup>&</sup>lt;sup>6</sup> M. Wigier (ed.), Analysis of Effects of Agricultural Policy towards Agriculture and Rural Areas, Series: "Multi-Annual Programme 2011-2014", Report No. 26, IAFE-NRI, Warsaw 2011.

The Sectoral Operational Programme (SOP), Measure 1.5. "Improving processing and marketing of agricultural products", was the next EU assistance programme – follow-on to SAPARD – under which Polish meat sector enterprises could apply for funding of their investment activities. Support was granted for improving sanitary and hygiene as well as veterinary conditions of production, its market orientation and using existing market niches, creating new and rationalising existing sales channels, improving product quality, increasing the added value of production, reducing adverse environmental impact, improving animal welfare as well as introducing new and modernising existing production technologies [*10 Years of...* 2014]. As part of this measure, the meat sector absorbed over PLN 600 million which accounted for 35.3% of funds thereunder (including the following industries: meat: 15.9%; poultry: 9.2%; other animal products: 10.2%). As a result of projects implemented under this measure, 500 meat sector plants carried out adaptation (structural) processes, including: 210 meat processing plants, 169 plants producing other animal products and 121 poultry sector plants. The average amount of funding per project was approx. PLN 1.6 million.

The RDP 2007-2013, Measure 1.2.3. "Increasing the added value of basic agricultural and forestry production", was follow-on to previous programmes of support for investments in the meat sector. This measure was aimed at making food processing enterprises more competitive which was conditional upon an increase in the added value, improvement in production conditions in relation to current norms and standards as well as a reduction in production costs and development of new products and production technologies. This support was intended for, among others: investments, development of the processing industry's potential, job creation and organisation of agricultural producers' groups [*Report on the...* 2014]. The meat sector was funded with over PLN 540 million which accounted for nearly 36% of disbursed funds. This support was allocated for upgrading and modernising processing plants, improving product quality, increasing the added value and providing production lines with IT tools.

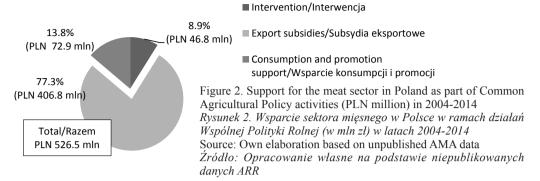
Public funds from the EU assistance programmes, i.e. SAPARD (Measure 1), the SOP "Agriculture" (Measure 1.5.), the RDP 2007-2013 (Measure 1.2.3.), allocated in 2003-2013 to support investments in the meat sector totaled over PLN 1.92 billion (more than 50% of the total support). These programmes showed continuity in relation to their objectives and were aimed at adapting meat processing plants to EU requirements and standards, thus improving the competitiveness of the Polish meat sector in the international arena.

#### Support for the meat sector with EU Common Agricultural Policy instruments

Support for the meat sector with the CAP instruments, to which Polish entrepreneurs had equal access as EU entrepreneurs in the post-accession period, included, among others: support for the consumption of meat and its promotion, export subsidies, intervention measures – private storage and exceptional support measures. In 2004-2014, the Polish meat sector received nearly PLN 530 million of EU funding for the measures referred to above (Fig. 2).

Export subsidies for export of selected assortments of meat products: beef, pork and poultry (over PLN 400 million), were the main and most important instrument of market support for the meat sector in 2004-2014. The highest support was granted for beef export (PLN 247 million), followed by pork (PLN 146 million) and poultry export (PLN 14 million, including PLN 8 million of export subsidies for live poultry and eggs). In accordance with GATT/WTO Doha Round agreements (2004), the European Commission pledged to gradually reduce support in the form of subsidies for EU meat product export until they are completely phased out by 2013. Thanks to export subsidies, Polish meat products were competitively priced in non-EU markets which resulted in dynamic growth of their export [Tereszczuk 2014].

Intervention measures, among others, exceptional support measures for the pork market in relation to "avian influenza" outbreaks in certain EU Member States in 2007, were another instrument to regulate and stabilise the meat market (under this mechanism, Poland received PLN 15.8 million of funding). Furthermore, as the situation in the pork market in 2007 was very hard, the European Commission decided to introduce private storage of pork in 2008 and 2011. For



this purpose, Poland secured PLN 24.1 million of funding from the EU budget. In 2014, as there were African swine fever (ASF) outbreaks in our country, affected pig breeders from a so-called "buffer zone" received PLN 6.9 million of compensation.

Promotion and information activities carried out in the meat product market, both at home and abroad, indirectly triggered an increase in export of these products. In 2004-2014, the meat industry received nearly PLN 73 million in the form of grants for promotion and information campaigns. As of its accession, Poland – under this CAP instrument – has been granted permission by the European Commission to carry out nine promotion campaigns (programmes) for meat products. The primary objective of these activities is to raise consumer awareness of meat product quality which should lead to higher sales of meat products in world markets and a much better competitive standing of our meat producers.

#### Foreign trade in meat products

For many years, foreign trade in meat products has been a vital part of Polish agri-food trade. In 2014, the share of meat product export in agri-food export reached 18.5% and was higher than in 2004 by 2.3 pp, while the share of import amounted respectively to 14% and was higher than in 2004 by 7.3 p.p.

Within ten years of our membership in the EU structures, trade in meat products increased more than five-fold. Proceeds from export of meat and meat products increased more than four and a half fold to EUR 3.9 billion, including 33% of pork export, 41% of poultry export and 26% of beef export. Export volume of meat products (expressed in meat equivalent) increased at that time nearly four-fold (poultry export increased the most – six-fold to 792 thousand tonnes). Meat product import increased seven-fold, while the greatest increase was recorded for pork import (import value increased nine and a half fold to EUR 1.7 billion and volume – to 825 thousand tonnes). The balance of foreign trade in meat products in 2004-2013 increased nearly three and a half fold to EUR 1.9 billion (Tab. 1).

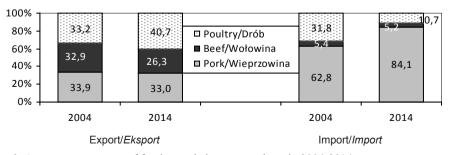


Figure 3. Assortment structure of foreign trade in meat products in 2004-2014 Rysunek 3. Struktura asortymentowa handlu zagranicznego produktami mięsnymi w latach 2004-2014 Source: own elaboration based on unpublished ACCA and MOF data Źródło: opracowanie własne na podstawie niepublikowanych danych CAAC i MF

Specification/	Foreign trade/Handel zagraniczny										
Wyszczególnienie	thous.tonnes (in product weight, livestock in meat equivalent)/ tys. t (w wadze produktu, żywiec w ekwiwalencie mięsa)					mln EUR/ <i>mln euro</i>					
	2004	2008	2010	2013	2014	2004	2008	2010	2013	2014	
Pork/Wieprzowina											
Export/Eksport	207	427	471	705	638	287	782	845	1 530	1 298	
Import/Import	126	516	605	804	805	186	1 045	1 169	1 814	1 745	
Balance/Saldo	81	-89	-134	-99	-167	101	-263	-324	-284	-447	
Beef/Wołowina											
Export/Eksport	119	232	324	315	324	279	681	902	1 089	1 0 3 7	
Import/Import	5	12	20	26	27	16	42	59	96	107	
Balance/Saldo	114	220	304	289	297	263	639	843	993	930	
Poultry/Drób											
Export/Eksport	129	297	454	643	662	282	721	840	1 346	1 605	
Import/Import	87	58	71	98	100	94	116	128	189	223	
Balance/Saldo	42	239	383	545	562	188	605	712	1 157	1 382	
Meat in total/Mięso ogółem											
Export/Eksport	455	956	1 249	1 596	1 624	848	2 184	2 587	3 965	3 940	
Import/Import	218	586	696	928	932	296	1 203	1 3 5 6	2 099	2 075	
Balance/Saldo	237	370	553	668	692	552	981	1 2 3 1	1 866	1 865	

Table 1. Foreign trade in meat products Tabela 1. Handel zagraniczny produktami miesnymi

Source: see fig. 2

Źródło: jak w fig. 2

In 2004-2014, the growth rate of export of the main meat types from Poland was similar and ranged from 14% to 19% per year. Pork import grew even more rapidly (by approx. 25% per year). In 2014, pork export declined slightly as a result of African swine fever (ASF) outbreaks in our country and the embargo on importing Polish pork imposed by its major non-EU recipients. The EU Member States have been and remain Poland's main trade partner in trade in meat and its products. The process of market diversification, particularly evident in 2013 in pork export, was halted.

The structure of export and import of meat and its products in 2004-2014 underwent significant changes. The share of beef in export decreased the most, i.e. by 6.6 p.p. to 26.3%, and of pork – by 0.9 p.p. to 33%, in favour of poultry whose share increased by 7.5 p.p. to 40.7%. Import is dominated by pork whose share in all types of meat purchased abroad is currently 84% (increase of 21.3 p.p.). In the structure of import of meat products to Poland, the share of poultry decreased three-fold to 10% and that of beef dropped slightly, i.e. to 5.2% (Fig. 3).

## Changes in the Polish meat industry in comparison to selected EU member states

Poland is a major meat producer in the European Union. In 2013, the value of marketed production of the Polish meat industry amounted to nearly EUR 13.2 billion (at current prices) which ranked us sixth behind: Germany, France, Italy, Spain and the UK. However, when calculating the value of marketed production at comparable prices, we advance to the fifth place ahead of the UK (Tab. 2).

In 2003-2013, the value of marketed production of the Polish meat industry increased from EUR 11.6 billion to EUR 22.9 billion (at comparable prices), while the growth rate was 7.0% per year and belonged to one of the highest in the EU-27/28. This production in Poland grew more than twice as fast as the average rate in the EU-15. Thus, the Polish meat sector also improved its standing in the Community, as our share in production increased from 7.6% in 2003 to 10.8% in 2013.

A significant improvement in labour productivity was another positive change that took place in the Polish meat industry in the past decade. Although, in the period under analysis, i.e. 2003-2013, this phenomenon was common in the EU meat industry as a whole, its pace in our meat

Table 2. Value of marketed production<sup>a</sup> and labour productivity in the meat industry in selected EU Member States *Tabela 2. Wartość produkcji sprzedanej<sup>a</sup> oraz wydajność pracy w przemyśle mięsnym w wybranych krajach Unii Europejskiej* 

Item/	Value of marketed		Annual	Labour pr	oductivity	Annual				
Wyszczególnienie	production <sup>a</sup> [EUR		changes in	[EUR thousand		changes in				
	billion]/Wartość		2004-2013/	per employee]/		2004-2013/				
	produkcji sprzedanej <sup>a</sup>		Zmiany rocznie	Wydajność pracy [tys.		Zmiany roczne				
	[mld euro]		w latach		dnionego]	w latach				
	2003	2013	2004-2013 [%]	2003	2013	2004-2013 [%]				
EU/UE-15	131.9	168.7	2.6	175.0	270.6	4.5				
EU/UE-12/13	25.5	43.0	5.5	99.7	164.0	5.1				
EU/UE-27/28	156.2	211.7	3.1	156.0	239.1	4.4				
Including/W tym:										
Belgium/Belgia	4.4	6.3	3.5	315.0	466.4	4.0				
Germany/Niemcy	25.9	42.2	5.0	128.5	240.3	6.5				
Denmark/Dania	3.8	4.5	1.7	167.0	252.2	4.2				
Spain/Hiszpania	16.8	24.0	3.6	227.2	306.9	3.1				
France/Francja	26.4	25.9	-0.2	160.5	207.2	2.6				
Italy/Włochy	17.2	23.0	2.9	319.1	433.8	3.1				
Netherlands/Holandia	7.0	8.1	1.5	317.8	571.1	6.0				
UK/Wielka Brytania	16.9	17.8	0.5	144.5	240.8	5.2				
Poland/Polska	11.6	22.9	7.0	106.1	200.6	6.6				
Czech Rep./Czechy	3.7	3.2	-1.5	133.4	148.4	1.1				
Hungary/Węgry	3.7	4.3	1.3	99.2	159.8	4.9				
Romania/Rumunia	2.2	5.2	8.9	75.0	114.0	4.3				
Bulgaria/Bułgaria	1.0	2.1	7.8	73.7	135.4	6.3				

<sup>a</sup> at comparable prices/w cenach porównywalnych

Source: own calculations based on Eurostat data

Źródło: obliczenia własne na podstawie danych z Eurostat

sector was among the fastest in the EU-27/28. In this period, labour productivity in the Polish meat industry grew from EUR 106.1 thousand per employee to EUR 200.6 thousand per employee (at comparable prices), i.e. by 6.6% per year, while in the EU-15 – it increased on average by 4.5% per year. Such a significant improvement in labour productivity in the Polish meat industry helped narrow the gap between Poland and the most developed EU Member States [Mroczek 2013].

Turnover of an average meat company indicates an increase in the economic strength and competitiveness of Polish companies in the European market. In 2003-2013, the average turnover of a meat company in Poland tripled from EUR 3.0 million to EUR 9.3 million and was higher than the average in the EU-15 by 2/3 and than in the EU-12/13 by 60%. In this respect, we are ahead of the leading producers of the EU-15 meat industry, i.e.: Spain (EUR 7.3 million), Italy (EUR 6.6 million), France (EUR 3.8 million) and Germany (EUR 3.8 million). Nevertheless, it was three times lower than in Denmark (EUR 30.3 million) and nearly twice lower than in the UK (EUR 17.6 million) or the Netherlands (EUR 14.6 million). The process of concentration and consolidation of the meat industry in Poland is progressing much faster than in the other EU Member States.

## Conclusions

- 1. Poland's integration with the European Union triggered a large investment boom in the Polish meat industry. It was due to, among others, the need for processing plants to adapt to EU veterinary, sanitary and hygiene norms. In 2004-2014, capital expenditure in the meat industry amounted to PLN 13.0 billion which accounted for 17.5% of total investment expenditure made at that time by food industry enterprises.
- EU assistance funds were a factor that supported investment processes in the Polish meat industry in 2004-2014. The value of funding received under various EU assistance programmes (SAPARD, SOP, RDP 2007-2013) by the meat industry amounted to PLN 1.92 billion which

accounted for over 50% of funding disbursed for the food industry as a whole under these programmes. This amount helped finance nearly 15% of capital expenditure incurred by industry players in 2004-2014.

- 3. Funds obtained under the Common Agricultural Policy (CAP) market instruments (PLN 526 million) had a positive impact on the development of the meat sector in Poland. They helped improve operational conditions for processing plants which strengthened their competitive standing in the European market. Poland became a leading producer of meat (mostly poultry) in the EU.
- 4. Within ten years of our membership in the European Union, export of meat and its preparations increased more than four and a half fold (from EUR 0.85 billion in 2004 to EUR 3.94 billion in 2014), while import seven-fold (from EUR 0.30 billion to EUR 2.08 billion), and the trade balance more than tripled to EUR 1.86 billion. Results of foreign trade in meat products prove that Polish producers in the meat sector are highly competitive in foreign markets.
- 5. The meat industry made good use of the opportunity that Poland's accession to the European Union presented. Export and domestic demand turned into a true engine for rapid production growth. A significant improvement in labour productivity in this sector was another positive development. Contemporary geopolitical realities and advancing globalisation processes necessitate a search for new markets, i.e. their greater diversification, which is obviously nothing easy.

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#### Streszczenie

Lata 2004-2014 były okresem intensywnego rozwoju polskiego przemysłu mięsnego, do czego niewątpliwie przyczyniło się przystąpienie Polski do UE i możliwość korzystania z dotacji unijnych w ramach wspólnej polityki rolnej (WPR). Dzięki temu wsparciu przemysł mięsny w Polsce rozwijał się znacznie szybciej niż w krajach UE-15 i był liderem UE-12/13. Integracja z UE pozytywnie wpłynęła na przyspieszenie wzrostu produkcji polskiego przemysłu mięsnego, a kilkuletni okres dostosowawczy do wymogów UE istotnie zmienił wizerunek polskich zakładów mięsnych na Wspólnym Rynku Europejskim. Polski przemysł mięsny stał się liczącym producentem mięsa i jego przetworów na rynku europejskim (w 2014 roku 5. pozycja w UE), a polskie zakłady przetwórcze uważane są za jedne z najnowocześniejszych w UE. Jednym z głównych czynników rozwoju przemysłu mięsnego w Polsce w minionej dekadzie był szybko rosnący eksport produktów mięsnych. Drugim ważnym czynnikiem wzrostu produkcji był rosnący popyt wewnętrzny. Potrzebna jest jednak większa dywersyfikacja rynków zbytu (kraje azjatyckie, afrykańskie, Bliskiego Wschodu).

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