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# POLISH FOREIGN TRADE IN DAIRY PRODUCTS IN THE ASPECT OF THE EUROPEAN INTEGRATION

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ABSTRACT. This paper analyses Polish foreign trade in dairy products in the aspect of the European integration. At present, the EU countries are the main recipients of Polish dairy products. Poland's accession to the EU caused a significant growth of Polish dairy trade. The biggest (fourfold) growth in export value applied to butter, while cheese import value doubled. The clear convergence of Polish dairy products prices was noticed after Poland's accession to the EU.

**Key words:** export, import, dairy products, skimmed milk powder, butter, cheese

#### Introduction

Poland's accession to the European Union on 1st May 2004 is connected with lifting some previous barriers of access to the foreign markets. Changing the conditions of the European Union market access, as well as the requirement of adjusting to the EU standards have had an influence on milk market. The aim of this paper is to analyse Polish foreign trade in dairy products in the aspect of the European integration.

### Material and methods

The analysis carried out in this paper is based on data from Institute of Agricultural and Food Economics, Agricultural Market Agency and Ministry of Agriculture and Rural Development, as well as Foundation of Assistance Programs for Agriculture (Foreign Agricultural Markets Monitoring Unit). Prices quotations from European Commission and Central Market and Prices Department for Agricultural-, Forest- and Food Products Ltd. were also used in this paper.

Polish foreign trade in dairy products was analyzed by products and by countries in 2003-2004.

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## Results of Polish foreign trade in dairy products in 2004

Dairy products hold an important position in Polish agricultural trade. Opening the borders and gaining the free access to the Common Market with 450 M. consumers resulted in dynamic growth in trade in dairy products. In 2004 export value reached 731 M. USD, while import value amounted to 147 M. USD (comparing with 2003, export value almost doubled, while import increased even more than two times – on the basis of FAPA data) (Fig. 1), what made respectively 12% and 2% of total Polish agri-food export or import.

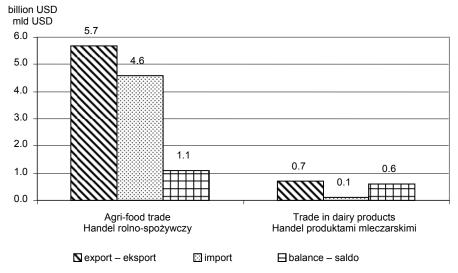


Fig. 1. Polish foreign trade in dairy products in 2004 (on the basis of **Analiza polskiego handlu...** 2004)

Ryc. 1. Polski handel zagraniczny produktami mleczarskimi w 2004 roku (na podstawie **Analizy polskiego handlu...** 2004)

Beside the European integration, duty-free quotas before Poland's accession to the EU<sup>1</sup>, high prices on the world market of dairy products and depreciation of Polish currency in relation to Euro were the main factors determining significant rise in export value and high positive trade balance (584 M. USD). Improvement in veterinary conditions in milk production and processing industry make export development easier as well. According to the data on 26th April 2005, 225 entities were registered on the list of establishments approved for Intra Community trade. There were more than 70% of all milk processing enterprises in Poland. It is important that majority of them had high processing capacity. Only six from the authorized companies processed annually less than 500 thous. t of milk, and 17 of them – less than 2.0 M. t a year (data from General Veterinary Inspectorate). At present, there are 144 establishments in transition, which

<sup>&</sup>lt;sup>1</sup>By the terms of agreement on bilateral trade liberalization, the EU-15 granted Poland duty-free export quotas for 13.0 thous. t of milk powder, 11.7 thous. t of cheese and 7.8 thous. t of butter. These quotas were entirely used (**Szajner** 2005).

have to adjust their production lines and production structure to the EU standards. Until the authorization they are allowed to sell their products exclusively on the domestic market.

# Commodity and geographic structure of Polish foreign trade in dairy products

Milk powder, cheese, curds and butter are the main dairy products in Polish export, as well as import. In 2004 Poland exported both milk powder and cheese and curds worth about 230 M. USD each of them. Value of butter export reached 90 M. USD (Table 1), what meant fourfold increase in sales in relation to 2003. The biggest growth in export was noticed in case of milk and cream. While in 2003 value of these products export was approximately about 100 thous. USD, in 2004 milk and cream worth almost 58 M. USD were sold abroad. This year export of milk and cream was running at the 8% level of total Polish export of dairy products (Fig. 2). Dairy products exported from Poland, including milk and cream, are usually used for further processing and can be taken as semi-finished products. The same trend applies to import.

Table 1
Export of dairy products from Poland in 2003-2004 (M. USD)
(on the basis of Analiza polskiego handlu... 2004 and Handel zagraniczny... 2004)
Eksport produktów mleczarskich z Polski w latach 2003-2004 (mln USD)
(na podstawie Analizy polskiego handlu... 2004 i Handlu zagranicznego... 2004)

Product		2003		2004			
Produkt	I-VI	I-IX	I-XII	I-VI	I-IX	I-XII*	
Milk powder Mleko w proszku	64.4	123.7	168.9	113.0	190.4	224.1	
Cheese and curds Sery i twarogi	57.2	90.0	137.0	98.4	161.8	230.5	
Butter – Masło	10.6	14.7	22.1	44.6	66.2	89.7	
Yoghurt, buttermilk, cur- dled milk and sour cream Jogurt, maślanka, mleko zsiadłe i śmietana kwaśna	9.8	14.0	20.5	17.7	30.7	38.4	
Milk and cream Mleko i śmietana	0.3	0.2	0.1	8.3	21.5	57.6	
Whey – Serwatka	8.8	13.9	20.8	12.4	19.1	32.0	
Ice cream – Lody	6.5	10.5	11.2	6.8	10.8	19.2	
Total – Suma	157.6	267.0	380.6	301.2	500.4	691.5	

<sup>\*</sup>Estimation of Institute of Agricultural and Food Economics.

<sup>\*</sup>Szacunek Instytutu Ekonomiki Rolnictwa i Gospodarki Żywnościowej.

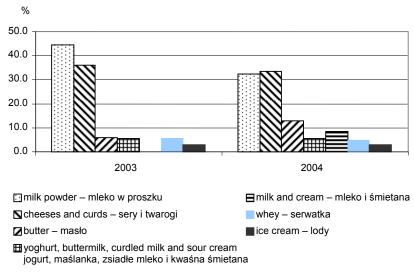


Fig. 2. Commodity structure of dairy products export in 2003-2004 (on the basis of data from Table 1)

Ryc. 2. Struktura towarowa eksportu produktów mleczarskich w latach 2003-2004 (na podstawie danych z tabeli 1)

The dynamic rise in export of all dairy products has been observed since 2003. Strong internal rotation characteristic for trade in dairy products in the nineties was stopped<sup>2</sup>. Although export value was rising, after Poland's accession to the EU share of milk powder in export structure decreased. In 2004 it reached 32.4% and was insignificantly (by about 1%) lower than export share of cheese and curds (Fig. 2).

Import of all dairy products, excluding milk powder, increased in 2004 in comparison with 2003. Last year Poland imported milk powder worth 11.5 M. USD (Table 2), what made 12% in Polish dairy import structure (Fig. 3). Import of cheese and curds gained in importance. Over twofold growth in cheese import value (from 21.4 M. USD in 2003 to 46.1 M.USD in 2004) resulted in its rising import share. In 2004 it amounted to 48% (Fig. 3).

In terms of dairy products, the main trade partners for Poland are the EU countries (Table 3). From January till June 2004 almost 50% of skimmed milk powder (27.5 thous. t worth about 60 M. USD) and more than 80% of butter (13 thous. t worth 40 M. USD) were exported to these countries. Quite important consumers of Polish skimmed milk powder were also developing countries.

The EU countries were significant suppliers of dairy products on Polish market. In 2003-2004 import of cheese from the EU reached 2.0 thous. t (Table 3) and it was more than 75% of total Polish cheese import. It should be stressed that gaining the free access

<sup>&</sup>lt;sup>2</sup>Excluding years 1999-2000, a dynamic growth of cheese and curds export had place, while in 1996-2000 butter export decreased almost five times. This situation was caused by imposing an embargo on import of dairy products from Poland at the end of 1997 on account of insufficient quality of Polish products (comp. **Pawlak** 2004).

Table 2
Import of dairy products to Poland in 2003-2004 (M. USD)
(on the basis of Analiza polskiego handlu... 2004 and Handel zagraniczny... 2004)
Import produktów mleczarskich do Polski w latach 2003-2004 (mln USD)
(na podstawie Analizy polskiego handlu... 2004 i Handlu zagranicznego... 2004)

Product		2003		2004			
Produkt	I-VI	I-IX	I-XII	I-VI	I-IX	I-XII*	
Milk powder Mleko w proszku	3.4	7.6	14.6	4.6	7.4	11.5	
Cheese and curds Sery i twarogi	10.0	15.0	21.4	11.0	19.3	46.1	
Butter – Masło	4.3	6.5	10.6	5.0	8.1	12.8	
Yoghurt, buttermilk, cur- dled milk and sour cream Jogurt, maślanka, mleko zsiadłe i śmietana kwaśna	0.3	0.8	1.2	0.9	1.2	5.1	
Milk and cream Mleko i śmietana	2.2	3.9	5.9	3.7	4.9	9.0	
Whey – Serwatka	1.4	2.2	3.2	2.9	5.2	6.4	
Ice cream – Lody	1.4	1.8	1.9	1.8	2.4	5.1	
Total – Suma	23.0	37.8	58.8	29.9	48.5	96.0	

<sup>\*</sup>Estimation of Institute of Agricultural and Food Economics.

<sup>\*</sup>Szacunek Instytutu Ekonomiki Rolnictwa i Gospodarki Żywnościowej.

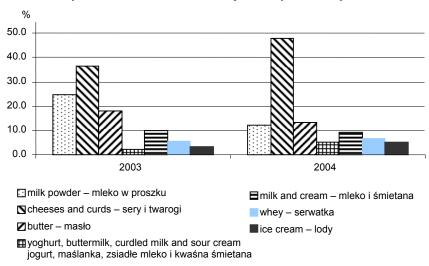


Fig. 3. Commodity structure of dairy products import in 2003-2004 (on the basis of data from Table 2)

Ryc. 3. Struktura towarowa importu produktów mleczarskich w latach 2003-2004 (na podstawie danych z tabeli 2)

Table 3
Geographic structure of foreign trade in chosen dairy products in 2003-2004
(on the basis of Analiza polskiego handlu... 2004 and Handel zagraniczny... 2004)
Struktura geograficzna handlu zagranicznego wybranymi produktami mleczarskimi
w latach 2003-2004

(na podstawie Analizy polskiego handlu... 2004 i Handlu zagranicznego... 2004)

	Export Eksport				Import Import			
Specification Wyszczególnienie	I-VI 2003		I-VI 2004		I-VI 2003		I-VI 2004	
	thous. t	M. USD mln USD	thous. t	M. USD mln USD	thous. t	M. USD mln USD	thous. t	M. USD mln USD
Skimmed milk powder Odtłuszczone mleko w proszku	41.3	64.4	58.4	113.0	2.0	3.4	2.1	4.6
EU-15 – UE-15	8.9	13.8	26.6	58.1	0.7	1.6	1.0	2.4
EU-10 – UE-10	0.8	1.4	0.9	1.5	0.1	0.1	0.5	1.3
CSI & Central-Eastern Europe WNP i Europa Środ- kowowschodnia	2.9	2.1	2.6	2.7	1.2	1.6	0.5	0.9
Developing countries Kraje rozwijające się	27.9	44.9	28.2	50.2	-	-	_	-
Butter – Masło	4.8	10.6	15.5	44.6	2.3	4.3	2.2	5.0
EU-15 – UE-15	4.7	10.4	12.4	39.2	0.3	1.2	0.3	1.3
EU-10 – UE-10	0.1	0.1	0.6	1.0	1.8	2.9	0.7	1.4
CSI & Central-Eastern Europe WNP i Europa Środ- kowowschodnia	_	_	0.8	1.0	_	_	_	_
Developing countries Kraje rozwijające się	_	-	0.6	1.2	-	-	0.2	0.3
Cheese – Sery	21.9	57.2	36.2	98.4	2.5	10.0	2.6	11.0
EU-15 – UE-15	5.7	15.9	13.2	40.6	1.8	8.0	1.9	9.1
EU-10 – UE-10	6.6	16.3	8.6	25.2	0.2	0.8	0.1	0.3
CSI & Central-Eastern Europe WNP i Europa Środ- kowowschodnia	3.7	8.2	8.1	15.4	-	-	_	_
Developing countries Kraje rozwijające się	3.4	9.6	5.1	13.1	-	-	_	_

to the Common Market resulted not only in increase in export to the EU<sup>3</sup> but also in growth in import quantity, as well as its value. It was noticeable especially in case of skimmed milk powder. During first six months 2004 quantity of milk powder imported by Poland from eastern markets decreased by 700 t, at the same time its import from the EU rose as much (Table 3).

# Foreign trade in chosen dairy products in 2003-2004

Assuming that favourable commodity structure and trade conditions are in the simplest way proven by positive trade balance value, it can be stated that trade in milk powder was the most beneficial for Poland. In 2004 trade in this product showed a balance of 212.6 M. USD (Fig. 4) and it was the most positive balance in dairy trade noticed this year. Because import of milk powder stayed at low, comparable to last year's level (just insignificant import decrease from 14.6 M. USD in 2003 to 11.5 M. USD in 2004 was observed), trade balance rose almost exclusively in proportion to growth in export value. First of all, increase in export of Polish milk powder was determined by free access to the EU market but also by profitable for exporters, as well as importers transaction prices. Polish exporters gained higher prices than on the domestic market and at the same time these prices were lower than EU intervention price (average transaction

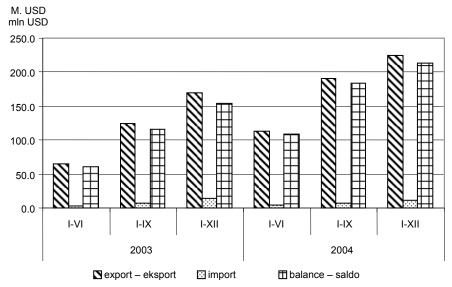


Fig. 4. Polish foreign trade in milk powder in 2003-2004 (on the basis of **Analiza polskiego handlu...** 2004 and **Handel zagraniczny...** 2004)

Ryc. 4. Polski handel zagraniczny mlekiem w proszku w latach 2003-2004 (na podstawie

Polski nandel zagraniczny miekiem w proszku w latach 2003-2004 (na podstawie Analizy polskiego handlu... 2004 i Handlu zagranicznego... 2004)

<sup>&</sup>lt;sup>3</sup>In 2004 export of Polish dairy products on the EU market increased, while sales on the eastern markets decreased. It was caused by imposing on Polish dairy products higher quality requirements than in Intra-EU trade, that in consequence made import from Poland forbidden.

price was 1600 EUR/t in comparison with EU intervention price reaching 1952 EUR/t – **Szajner** 2005).

In 2004 trade in cheese was also characterized by high positive trade balance. Comparing with 2003, export of Polish cheese rose by about 70% and although import value doubled, active balance amounted to 185 M. USD (Fig. 5). Growing share of cheese in export structure in 2004 is highly desirable because profit margin for high value added products is considerably higher than for mass products, like skimmed milk powder or butter.

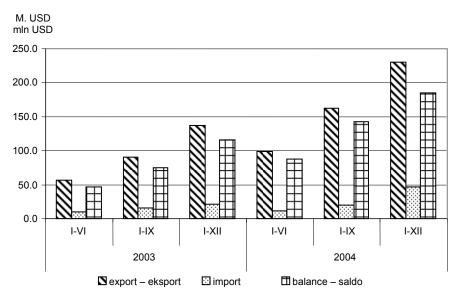


Fig. 5. Polish foreign trade in cheese in 2003-2004 (on the basis of **Analiza polskiego handlu...** 2004 and **Handel zagraniczny...** 2004)

Ryc. 5. Polski handel zagraniczny serami w latach 2003-2004 (na podstawie **Analizy polskiego handlu...** 2004 i **Handlu zagranicznego...** 2004)

As it has been already mentioned, butter export from Poland increased four times last year and reached supremely high level of 30 thousand tons (**Handel zagraniczny...** 2004). In June 2004 butter export value was two times higher than at the end of 2003 and in December last year it was about 90 M. USD (Fig. 6). Owing to insignificant growth in import, betterment of trade balance was dependent on exports results. Export of butter, as well as export of milk powder was rising prompted by high export prices (average export price in 2004 amounted to 2550 EUR/t and was lower than EU intervention price running at the 3052 EUR/t level – **Szajner** 2005).

Analysis results show that lower prices of dairy products are the strength of Polish dairy industry. They are based on low milk prices which are the result of lower by about 15-30% milk production cost. Trade costs are also lower. But these differences are scaling down in proportion to the flow of time and improvement in milk quality, as well as passing through some stages of marketing chain (Seremak-Bulge 2003). Poland's accession to the EU caused increase in prices of animal origin products including milk and milk products. At the end of 2004, skimmed milk powder price in Poland was lower than average EU price only by 6% (Fig. 7). Similar trend was noticed on the butter

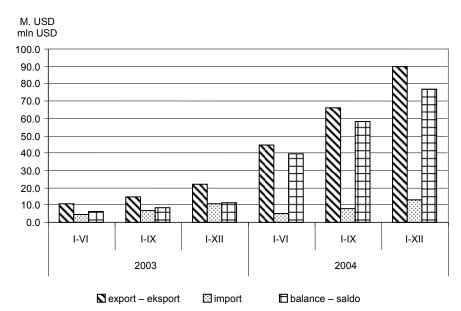


Fig. 6. Polish foreign trade in butter in 2003-2004 (on the basis of **Analiza polskiego handlu...** 2004 and **Handel zagraniczny...** 2004)

Ryc. 6. Polski handel zagraniczny masłem w latach 2003-2004 (na podstawie **Analizy** polskiego handlu... 2004 i **Handlu zagranicznego...** 2004)

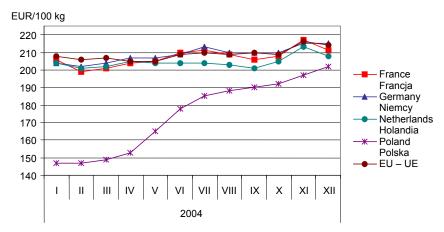


Fig. 7. Skimmed milk powder prices in Poland and the EU in 2004 (on the basis of Central Market and Prices Department for Agricultural-, Forest- and Food Products Ltd. and European Commission data)

Ryc. 7. Ceny odtłuszczonego mleka w proszku w Polsce i UE w 2004 roku (na podstawie danych Centralnego Ośrodka ds. Rynku i Cen Produktów Rolnych, Leśnych i Spożywczych Sp. z o.o. oraz Komisji Europejskiej)

market (Fig. 8) and cheese market (Fig. 9). In December last year cheese price in Poland was still lower than average one in the EU but at the same time higher than price quoted in the Netherlands or Germany.

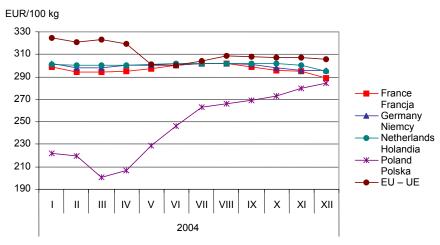


Fig. 8. Butter prices in Poland and the EU in 2004 (on the basis of Central Market and Prices Department for Agricultural-, Forest- and Food Products Ltd. and European Commission data)

Ryc. 8. Ceny masła w Polsce i UE w 2004 roku (na podstawie danych Centralnego Ośrodka ds. Rynku i Cen Produktów Rolnych, Leśnych i Spożywczych Sp. z o.o. oraz Komisji Europejskiej)

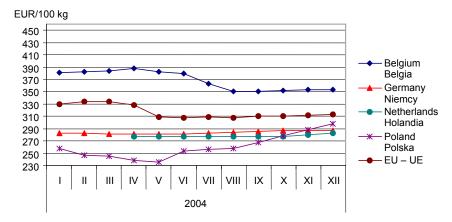


Fig. 9. Cheese prices in Poland and the EU in 2004 (on the basis of Central Market and Prices Department for Agricultural-, Forest- and Food Products Ltd. and European Commission data)

Ryc. 9. Ceny sera w Polsce i UE w 2004 roku (na podstawie danych Centralnego Ośrodka ds. Rynku i Cen Produktów Rolnych, Leśnych i Spożywczych Sp. z o.o. oraz Komisji Europejskiej)

There were favourable conditions for export increase in 2004 and Polish dairy industry achieved very good results of foreign trade. Compensation of the loss of comparative advantages in the field of costs and prices will be necessary to hold this trend in the future. It could be done by acceleration of concentration process both in agriculture and processing industry, introducing technological progress and quality assurance systems, as well as innovative assortment and marketing orientation (comp. **Rybicki** 2004).

### **Conclusions**

- 1. Dairy products hold an important position in Polish agri-food export structure.
- 2. The EU countries are the main recipients of Polish dairy products.
- 3. Milk powder, cheese and butter are the main dairy products exported, as well as imported by Poland.
- 4. Poland's accession to the EU caused the significant growth of Polish dairy trade. The biggest (fourfold) growth in export value applied to butter, while cheese import value doubled.
- 5. The clear convergence of Polish dairy products prices was noticed after Poland's accession to the EU.

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# POLSKI HANDEL ZAGRANICZNY PRODUKTAMI MLECZARSKIMI W WARUNKACH INTEGRACJI Z UNIĄ EUROPEJSKĄ

#### Streszczenie

Zmiana warunków prowadzenia wymiany handlowej, związana z włączeniem Polski w obszar Jednolitego Rynku Europejskiego i dostosowaniem polskiego sektora rolno-spożywczego do standardów UE, wywarła duży wpływ na rynek mleka i produktów mleczarskich. Celem artykułu było przeprowadzenie analizy polskiego handlu zagranicznego artykułami mleczarskimi w warunkach integracji z UE. Największymi odbiorcami polskich produktów mleczarskich są obecnie kraje UE. Przystąpienie Polski do UE spowodowało dynamiczny rozwój handlu artykułami mleczarskimi. Wartość eksportu najbardziej (czterokrotnie) zwiększyła się w przypadku masła, a importu (dwukrotnie) – w przypadku sera. Po akcesji Polski do UE nastąpiła wyraźna konwergencja cen polskich produktów mleczarskich z cenami unijnymi.