

# THE DEVELOPMENT OF FOREIGN TRADE IN AGRO-FOOD PRODUCTS – THE EXAMPLE OF POLAND AND ROMANIA

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## Abstract

*The enlargement of the European Union resulted in a significant increase in the trade of agro-food products within the UE, particularly among the new Member States. The purpose of this article is to analyse the changes in the values and directions of Polish and Romanian agro-food products trade compared with other EU countries. The study covered agri-food products in general, i.e. sections 1-24 of the Harmonized Commodity Description and Coding System, which then extracted products of the food industry by breaking them down by individual industries. The analysis was conducted on the basis of trade data from the WITS Comtrade database, expressed in USD. The analysis covered the period of 2003-2013, in most cases – extreme years have been compared. The article shows the position of Poland and Romania in the EU agri-food trade, an analysis of the geographical and commodity structure of the Polish and Romanian agri-food market and the analysis of their reciprocal trade in food have been conducted.*

## Keywords

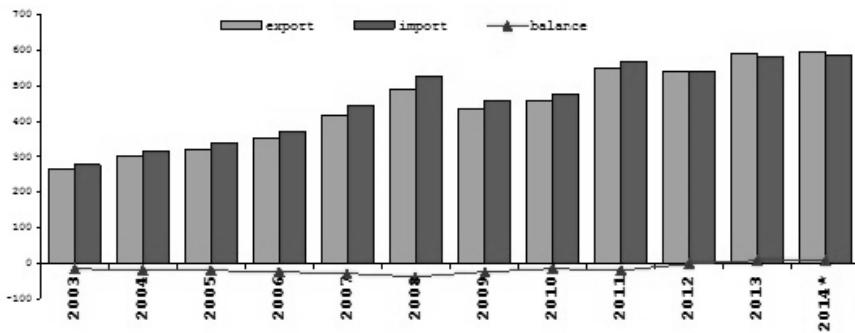
*foreign trade, food industry, Poland, Romania*

## 1. Introduction

The European Union has a leading position in world trade of agri-food products. The last two enlargements (in 2004 and 2007) have had a significant impact on EU trade and allowed to keep the leading position (next to the United States) in the global market. Among the 28 countries of the EU, only a few are major producers of food and occupy an important place in the trade. These include: France, Germany, Italy and Great Britain, and among the new Member States: Romania, Poland and Hungary. Romania is an important producer of food, it has one of the largest agricultural areas in the EU, good soil quality and moderate climate, therefore in the future, it could become not only a major producer, but also an exporter of food in the EU. Currently, the leading role of a food exporter among the new Member States is played by Poland.

## 2. The development of foreign trade of the EU food industry products in the years 2000-2013

In the 2003-2013 period, the EU agri-food products trade volumes increased steadily, the only exception was the year 2009, which resulted from an economic slowdown caused by the global economic crisis. During the period under consideration, the value of the EU agri-food exports has more than doubled, reaching the value of 589 billion USD in 2013. The EU import increased in a similar, although slightly lower, pace, which caused that in 2013, for the first time in many years the EU has achieved a positive trade balance in the amount of 9.2 billion USD (fig. 1.). The export growth rate was different in various Member States; the EU-12 export grew twice faster than in the EU-15 countries. This means that EU enlargement dynamised trade volumes of products throughout the Union, however, it was most noticeable in countries that joined to the EU in the past decade (Rowiński 2009).

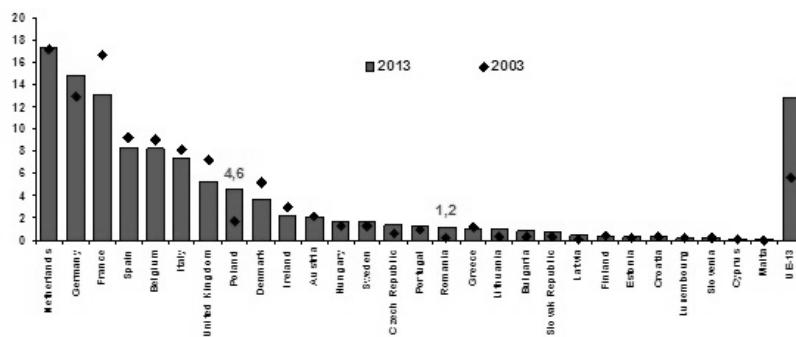


\* preliminary data

Source: Own calculations based on WITS-Comtrade data.

**Fig. 1 Trade in EU agri-food products in the period of 2003-2013, in billion USD**

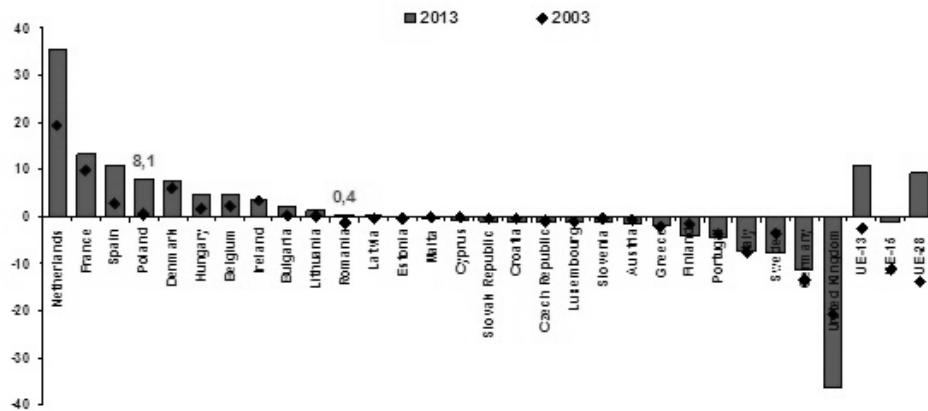
The largest exporters of agri-food products in the European Union are: Netherlands, Germany and France. These three countries account for as much as 45% of EU exports. Poland, with 4.6% took the eighth position in 2013, while Romania with 1.2% – on the 16<sup>th</sup> positikion. It is worth noting that during the period under consideration the participation of both States clearly increased (Poland's almost 3-times and Romania's more than 5-fold), which caused that Poland is now the largest exporter of food products among the new Member States and (except for Poland) only Hungary and the Czech Republic are ahead of Romania (chart 2).



Source: Own calculations based on WITS-Comtrade data.

**Fig. 2 The contribution of individual countries in EU agri-food exports, in %**

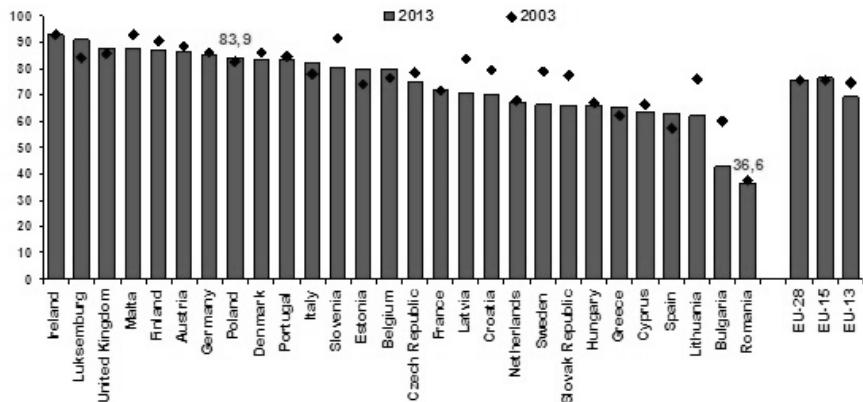
Among the 28 countries of the EU, 12 achieved a positive trade balance of agri-food products in 2013, including Poland and Romania. The Netherlands, France and Spain acquired the largest surplus. Poland, with a positive balance of USD 8.1 billion, was ranked on the 4<sup>th</sup> position, while Romania, with a surplus of USD 0.4 billion, took the 11<sup>th</sup> position (fig. 3.). Among the new Member States, Bulgaria, Lithuania and Latvia, in addition both these countries had a positive trade balance.



Source: Own calculations based on WITS-Comtrade data.

**Fig. 3 The balance of trade in agri-food products, in billion USD**

Both the EU export and import are dominated by food industry products. In 2013, the share of these products in the Polish food export was as much as 83.9% (compared to 75.4% in the EU) and was one of the highest among the EU Member States (Fig. 4.). Only Ireland, Luxembourg, United Kingdom, Malta, Finland, Austria and Germany, had higher shares than Poland. Food industry products also had greater significance in Polish agri-food export than in the Polish imports. In 2013 they accounted for 68.4% of food supplies to Poland, which is similar to the EU average. Such structure of exports is very beneficial, as the food sector entities, pursuing higher added value, make better use of available resources and achieve higher profits (Ambroziak, Bułkowska 2014). The share of the food industry products in Romanian agri-food exports is one of the lowest and is at the level of 36.6%; in imports it is almost 2 times higher.



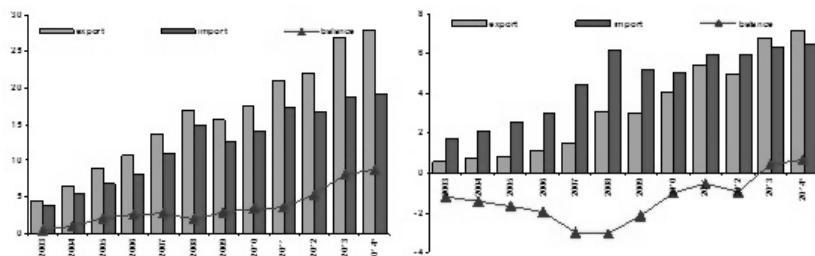
**Fig. 4 The share of food industry products in EU agri-food exports, in %**

Source: Own calculations based on WITS-Comtrade data.

### 3. Commodity and geographic structure of Polish and Romanian agri-food products trade

During the period under consideration, a dynamic increase of trade in Polish and Romanian agri-food products took place, which was the directly caused by the accession to the European Union (in 2004 and 2007). Despite certain converging trends, such as increasing trade flows or the improvement of the trade balance, the agri-food trade between of the two countries showed significant differences in both the pace of changes in the geographical and commodity structure.

In the period 2003-2013, the Polish agri-food export value increased 6 fold, to USD 26.9 billion (Fig. 5). The import of agri-food products has increased 4.7-fold, to USD 18.7 billion. During the EU membership, Poland had a permanent positive balance in agri-food trade, and its value grew steadily. The value of the surplus increased over the analysed period from just USD 0.5 billion in 2003 to USD 8.1 billion in 2013. It is worth mentioning that before 2003, Poland had a negative balance on trade of agri-food products. Integration with the EU has had a significant impact on the Polish food sector, which generates a major part of the balance in the agri-food sector. Adjusting companies to EU veterinary, sanitary, environment protection and animal welfare standards was an element of institutional transformation and modernisation of the sector. Intense activities of entrepreneurs, quite often supported by EU (SAPARD) and national funds, have caused that on the day of admission, the situation on standards compliance was better than forecasted, enabling the rapid development of export (Rowiński 2009).



\* preliminary data

Source: Own calculations based on WITS-Comtrade data.

**Fig. 5 Polish and Romanian agri-food trade in the years 2003-2014, in billion USD**

Also in Romania, the export of agri-food products has increased spectacularly during the post-accession period and in 2013 it has reached a value of USD 7 billion, 6 times higher than in 2006 and 12 times higher in comparison with 2003. In the first two years after Romania's accession to the EU, the value of trade in Romanian agri-food products has doubled compared to 2006, the last year before accession (Fig. 5). Imports also rose after the accession to the EU, but to a lesser extent than exports – 3.6 times in the 2003-2013 period. Romania's agri-food trade balance over the years was constantly negative. The largest deficit (approx. USD 3 billion) was reached in 2007 and 2008, that is in the first two years after the accession to the European Union. The general economic downturn generated by the economic crisis (including by increased unemployment and decreased income) has led to a decline in demand, which was reflected in the drastic restriction of agri-food products import (Voicilaş, 2013). After 2009, the growing trend in imports has been reversed, and export was strengthened, the result was a reversal of the trend in the trade balance in agri-food products. In 2013, for the first time in years, the Romanian agri-food trade balance became positive

(USD 445 million), pointing to fundamental changes in the sector since the accession to the EU (Viocilas 2014). The development of a modern food industry in Romania was late in comparison with other countries of Central and Eastern Europe, including Poland.

The main outlet for Polish and Romanian agri-food products, like for other Member States, is the intra-EU market. In 2013, as much as 78% (in comparison to EU average 73,8%) Polish exports were directed to other Member States, among which Germany (23%) and United Kingdom (7,6%) were traditionally the biggest recipients. The participation of EU Member States in Polish agri-food imports was lower than in exports (69% in 2013), which was due to the supply of food from other climate zones. In 2013, Romania directed only 58.4% of its exports onto the intra-EU market, which shows that it has a more diversified structure of food recipients than Poland, which is preferred in the long term. The largest recipients of agri-food products from Romania included Italy (12.3%) but also the Arab countries (6.2%) and Bulgaria (6.0%). In turn, Romania imports food mainly from the EU countries (81%), primarily from Hungary (15.9%) and Germany (14.2%). In 2013, Poland, as in 2003, was the 4<sup>th</sup> largest provider of food on the Romanian market, and its share has increased during the analysis period by 1.7 percentage points to 8%. Germany's participation in Romania's imports has increased much more, i.e. more than two-fold, from 6.1% to 14.2%, allowing it to rise from the 5<sup>th</sup> spot to the second, ahead of Poland and Bulgaria (table 1).

**Table 1 Poland and Romania's main trade partners in agri-food products trade**

N o	Poland				Romania			
	2003		2013		2003		2013	
	country	share %	country	share %	country	share %	country	share %
<b>EXPORTS</b>								
1	Germany	25,5	Germany	23,1	Italy	17,0	Italy	12,3
2	Russian Federation	8,0	United Kingdom	7,6	Greece	12,1	Egypt, Arab Rep.	6,2
3	Netherlands	6,0	Russian Federation	6,2	Germany	10,2	Bulgaria	6,0
4	Czech Republic	5,1	Czech Republic	6,0	Hungary	5,5	Hungary	5,8
5	United Kingdom	4,5	France	5,9	Croatia	5,2	Netherlands	5,8
	UE-28	69,5	UE-28	78,2	UE-28	76,3	UE-28	58,4
<b>IMPORTS</b>								
1	Germany	13,5	Germany	22,5	Hungary	13,7	Hungary	15,9
2	Netherlands	9,8	Netherlands	8,0	Brazil	8,6	Germany	14,2
3	Spain	8,2	Spain	5,4	France	7,4	Bulgaria	8,1
4	China	4,9	Denmark	4,7	Poland	6,3	Poland	8,0
5	Italy	4,9	Norway	4,5	Germany	6,1	Netherlands	6,9
	UE-28	62,9	UE-28	69,2	UE-28	59,0	UE-28	80,9

Source: Own calculations based on WITS-Comtrade data.

Polish agri-food trade was dominated by products of the food industry. The importance of these products in Polish agri-food export during the period considered was distinctly higher than the import and fluctuated within the limits of 83% (Table 2.). In import, food industry products accounted for 2/3 of the foreign food supplies to Poland. The growth of Polish agri-products trade surplus after the accession is a result of the growing surplus in the turnover of food industry products. In 2013 its value was more than USD 9.2 billion. The balance of trade in agricultural products was continuously negative. The situation was different in Romania, for which food industry products represent only 36.6% of exports and 70% of imports. Romania exports mainly agricultural products (cereal, oilseeds and livestock) to non-EU countries. The trade in this group of products generates a positive trade balance. However, it imports processed products from the EU. The commodity structure of agri-food products trade established in Poland is more beneficial for the Polish economy and testifies to the pro-exports character of the development of the national food industry. The exports of processed (final) products facilitates the promotion of the Polish food industry on external markets, which is more difficult to conduct when exporting agricultural raw materials or semi-finished industrial products used in secondary processing of food (Ambroziak, Bulkowska 2014). Products of the three most important branches of the food industry, i.e. meat, dairy and tobacco, generated almost 37% of Polish agri-food export revenue in 2013. In 2013, the products of the meat, oil, concentrate, confectionery and fish industry had the most importance in imports to Poland in 2013. The five most important product groups listed above accounted for 41% Polish import of agri-food products. The Romanian agri-food trade is characterised by low participation of products with high added value and low diversification of exports. The Romanian exports assortment included mainly products of the tobacco, oil (including sunflower oil) and meat industry, whereas it imported products of the meat (pork), oil (palm oil), concentrates and dairy (cheese and curd) industries. In comparison with 2003, the share of fruit, vegetable and wine industry products has decreased in Romanian exports. Agricultural products take the leading position in Romanian exports, but their production is very sensitive to weather conditions. Currently, live animals (particularly sheep and goats) play the most important role in exports. Despite access to the EU market, Romania still exports mainly to countries outside of the EU market. This trend will most probably change as a result of the modernisation of the processing plants complying with EU requirements, so that Romania will process and export meat with greater added value, thus reducing the export of live animals.

**Table 2 Poland and Romania's main export products and imported products in agri-food products' trade**

No	Poland				Romania			
	2003		2013		2003		2013	
	industry	share in %	industry	share in %	industry	share in %	industry	share in %
<b>EXPORTS</b>								
1	meat	17.2	meat	21.1	oilseeds	8.3	tobacco	10.0
2	fruit and vegetable	15.5	dairy	8.4	meat	5.3	oilseeds	7.1
3	dairy	8.2	tobacco	7.3	fruit and vegetable	4.9	meat	6.8

No	Poland				Romania			
	2003		2013		2003		2013	
	industry	share in %	industry	share in %	industry	share in %	industry	share in %
4	non-alcoholic beverages	6.8	confectionery	6.7	wine	4.5	concentrates	2.0
5	fish	6.5	fish	6.7	alcoholic beverages	4.5	bakery and pastry	1.6
	food industry products	82.6	food	83.9	food industry products	37.6	food industry products	36.6
<b>IMPORTS</b>								
1	oilseeds	15.1	meat	12.2	meat	11.9	meat	12.0
2	concentrates	8.0	oilseeds	11.3	tobacco	7.0	oilseeds	8.3
3	fish	7.9	concentrate	5.9	confectionery	6.9	concentrates	6.5
4	confectionery	7.1	confectionery	5.7	concentrate	6.2	dairy	6.0
5	meat	6.2	fish	5.7	oilseeds	4.9	confectionery	4.3
	food industry products	66.7	food industry products	67.9	food industry products	62.5	food industry products	69.5

Source: Own calculations based on WITS-Comtrade data.

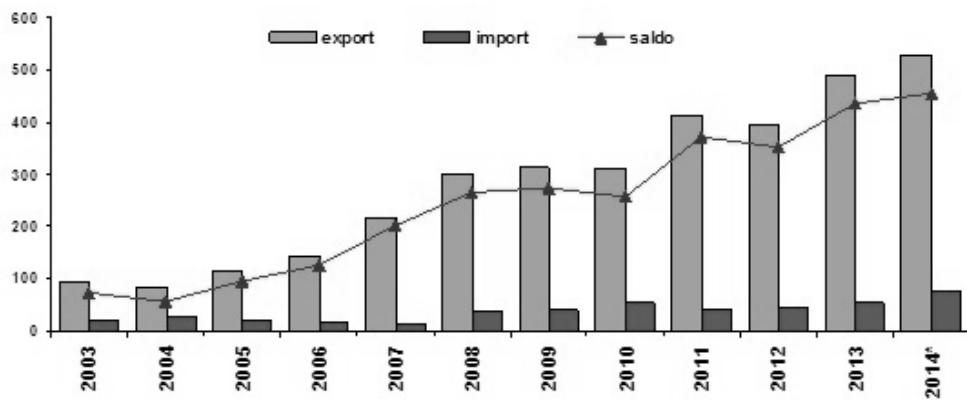
### 3. Trade between Poland and Romania

In the years 2003-2013 a dynamic growth of trade between Poland and Romania took place. In the analysed period, the value of Polish export to Romania increased more than 6 times, and imports – more than 2.5 times, reaching the value of USD 487 and 52 million, respectively. Poland had a constant positive trade balance in this product group with Romania and a constantly growing surplus value, which has reached a record value of USD 435 million in 2013, 6 times higher than in 2003 (fig.6).

The participation of Romania in Polish export is relatively small and amounts to approx. 2%. It is even smaller in imports – just 0.3%. This means that despite a positive trade balance, Romania is not a major trade partner for Poland. Polish participation in Romania's agri-food trade is also small, especially in exports (1%). In import, however, it amounts to 8%, which, as mentioned earlier, gives Poland the 4<sup>th</sup> spot among the largest food suppliers in the Romanian market (after Hungary, Germany and Bulgaria). Romania is a less significant partner for Poland and takes the 14<sup>th</sup> place among the largest outlets for Polish food and 39<sup>th</sup> among suppliers.

More than 88% of Polish export to Romania is comprised of food industry products (table 3.). In terms of import, this indicator is about 16 p.p. lower and amounts to 72%. In Romania, Poland mainly sells dairy (cheese and curd), confectionery (pastry, biscuits) articles, as well as food concentrates, processed food, meat and processed meat, whereas it imports tobacco, confectionery, bakery, pastry and meat products. In comparison with 2003, there has been a significant expansion of the range of mutual trade between both countries, as evidenced by the reduction in the share of main products, which, with a relatively small, although

constantly growing value of trade, can attest to the not fully used mutual trade potential of the partners.



Source: Own calculations based on WITS-Comtrade data.

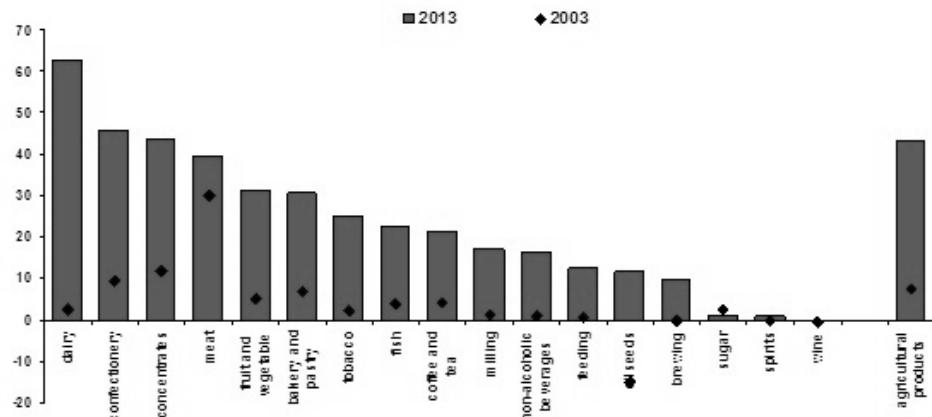
**Fig. 6 Agri-food trade between Poland and Romania in the years 2003-2014  
in USD million**

**Table 3 Main products of trade between Poland and Romania between 2003 and 2013**

No	Exports				Imports			
	2003		2013		2003		2013	
	industry	share in %						
1	meat	32.3	dairy	13.0	oilseeds	76.1	tobacco	23.3
2	concentrates	12.8	confectionery	10.5	fruit and vegetable	7.6	confectionery	10.2
3	confectionery	10.2	concentrates	9.4	bakery and pastry	3.9	bakery and pastry	10.0
4	bakery and pastry	8.2	meat	8.9	animal feed	3.1	meat	7.5
5	fruit and vegetable	7.2	tobacco	7.6	wine	2.5	fruit and vegetable	4.7
	food industry products	90.6	food industry products	88.1	food industry products	93.1	food industry products	72.1

Source: Own calculations based on WITS-Comtrade data.

Considering the low imports, Poland achieves a positive trade balance in products from all industries (except wine), as well as in trading agricultural products. The highest surplus is generated by dairy, confectionery, food concentrates and meat trade. This means that Polish food products are receiving more and more interest and recognition among consumers in Romania, which causes that this market is becoming increasingly attractive for Polish producers.



Source: Own calculations based on WITS-Comtrade data.

**Fig. 7 Trade balance in products of the food industry and agriculture between Poland and Romania in USD million**

## 5. Conclusion

Both Poland and Romania are one of the largest agricultural producers among the new Member States, significant in the EU as a whole, although their share in EU exports of agri-food products is still at a relatively low level (4.6% and 1.2%, respectively). Over the course of its membership, Poland had a constantly growing trade balance of agro-products, whereas Romania has achieved a positive balance only since 2013, i.e. after 5 years from its accession to the EU. Poland is experiencing a positive balance only in intra-EU trade, accounting for 78% of Polish exports and 69% of agri-food imports. Romania, in turn, still has a trade deficit in intra-EU trade, however the share of Member States in Romania's exports is significantly lower than in the case of Poland, and amounts to 58%, whereas it achieves its surplus in the trade with third countries.

Romania's exports include mainly agricultural products (64%), whereas processed food products are imported (70%). In Poland the situation is reversed (68% of exports and 67% of imports include food products), which is more beneficial for the sector and the whole economy. Accession to the EU had a direct positive impact on agri-food trade between the two countries, however Polish food industry has been preparing already in the pre-accession period thanks to numerous investments, adjusting to the conditions of the SME. In Romania, the sector's modernisation has taken place with a significant delay, however, thanks to the access to the since market and EU measures (programmes) for agriculture and the food industry, it is gradually improving the efficiency and the quality of food production and processing, which is reflected in the growth of exports both inside and outside the EU market. The value of trade between Poland and Romania is systematically increasing, however it is still at a relatively low level. Poland has a somewhat greater importance in Romania's imports, because with an 8% share it occupies the 4<sup>th</sup> position among the largest food suppliers on the Romanian market, especially in terms of dairy, confectionery, food concentrates and meat products market. Taking into account the production potential of both countries, one can think that in the future they will become increasingly important exporters of agri-food products among the EU countries, as well as important partners in mutual trade.

## References

1. Ambroziak Ł., Bułkowska M. 2014. Role of Poland in foreign trade in agri-food products of the European Union, in: Szczepaniak I. (ed.), Assessment of the competitiveness of Polish food producers in the European Union, series „Multiannual Programme 2011-2014”, no 126.1, Institute of Agricultural and Food Economics – National Research Institute, Warsaw, Poland, pp. 28-47.
2. Gavrilescu, C., Voicilaş, D.M. 2014. Competitiveness of the Romanian agri-food trade and the new agricultural policies, in: Kowalski, A., Wigier, M., Bułkowska, M. (ed.), The new EU agricultural policy – continuation or revolution?, series „Multiannual Programme 2011-2014”, no 99.1, Institute of Agricultural and Food Economics – National Research Institute, Warsaw, Poland, pp. 95-106.
3. Szczepaniak I. 2014. Wyniki handlu zagranicznego produktami rolno-spożywczymi, [in:] Szczepaniak I. (ed.), Monitoring i ocena konkurencyjności polskich producentów żywności (5), Synteza, seria „Program Wieloletni 2011-2014”, nr 115, Instytut Ekonomiki Rolnictwa i Gospodarki Żywnościowej – Państwowy Instytut Badawczy, Warszawa, Polska, pp. 25-50.
4. Rowiński J. 2009. Wpływ integracji z Unią Europejską na handel zagraniczny artykułami rolno-spożywczymi, [in:] Urban R, (ed.) Stan polskiej gospodarki żywnościowej po przystąpieniu do Unii Europejskiej (6), Synteza, Synteza, seria „Program Wieloletni 2005-2009”, nr 145, Instytut Ekonomiki Rolnictwa i Gospodarki Żywnościowej – Państwowy Instytut Badawczy, Warsaw, Poland.
5. Voicilaş, D.M. 2014. Agri-food Products' Competitiveness in Balkan Region – Study on Romanian Agri-food Trade, Turkish Journal of Agricultural and Natural Sciences, Special Issue: 2, 2014.
6. <http://wits.worldbank.org>.