

TRADE CHARACTERISTICS OF NEW MEMBER STATES' AGRICULTURE**TAMAS MIZIK**

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ABSTRACT

New member states (NMS) joined the European Union (EU) in 2004 or later. They became a part of the common, unified market. Without any trade restrictions, NMS were able to trade with every member state. On the other hand, generous support of the Common Agricultural Policy also boosted their agricultural sector. This paper gives an overview of the NMS' agricultural performance, followed by a detailed trade analysis. It identifies major export products and the concentration of trade. Agricultural trade will be separated into NMS and old member states (OMS) to reveal differences and similarities in the trade patterns.

Keywords: New Member States, agricultural production and trade, agricultural chapters

INTRODUCTION

New member states (NMS) joined the European Union (EU) in 2004 or later. They became a part of the common, unified market. It resulted in new market opportunities as well as new threats to the agricultural sector as well. It employs 8.55 million people in the EU, approximately half of them in the NMS (EUROSTAT, 2019). Agriculture contributes to the Gross Domestic Product and to the trade balance.

Compared to Poland, Hungary and Romania operated with a higher level of support, but they have not paid enough attention to measures aimed at enhancing competitiveness, unlike Poland (KIRSCHKE, 2009). In general, the EU accession had a positive impact on the agricultural productivity and trade performance of the new member states (CSÁKI AND JÁMBOR, 2009). However, farmers in the NMS had/have to compete with OMS farmers under a common policy framework (the Common Agricultural Policy).

MATERIAL AND METHOD

Basic agricultural indicators (contribution of agriculture to the GDP, agricultural employment and size of agricultural production) are based on World Bank's WDI and FAO database. Trade data (agricultural export and import, trade balance) is derived from the WTO database. The major data source of the paper is the World Bank's World Integrated Trade Solution (WITS) database at the HS-2 level between 2000 and 2017 on agricultural products (chapters 1-24). It covers almost four pre-accession years (or even more for Bulgaria, Romania and Croatia). The last year is the latest available one in the WITS database. List of the analyzed chapters from live animals (chapter 1) to tobacco and

manufactured tobacco substitutes (chapter 24) can be found in *Annex 1*. Due to the marginal share of agriculture, Cyprus and Malta are excluded from the analysis.

Based on the above-mentioned databases, mathematical and statistical calculations were made (shares, differences, etc.). Trade data was separated both on agricultural chapter and NMS member state level in order to reveal chapter and country-specific patterns. Extra- (outside the region) and intra-trade (within the region) were also analyzed. It should be noted that, for easier comparison, only intra-trade values are represented. For extra-trade values, this is calculated by 100% minus the percentage share of the intra-trade.

RESULTS

Agriculture is more important in the new member states than in the old ones measured either in sectoral value added or agricultural employment (*Table 1*). The EU averages were 1.4% and 4.3% respectively compared to the NMS averages of 3.02% and 7.59% (World Bank's WDI, 2019). Among the NMS, Romania has the most significant agricultural sector which employs almost one-fourth of the total workforce. Romania is followed by Poland (10.58%) and Lithuania (7.98%).

Table 1. Basic indicators of the NMS' agriculture, 2016

	Agricultural value added (% of GDP)	Agricultural employment	Agricultural production (million USD)
Bulgaria	4.05	6.75	3931
Croatia	3.14	7.60	1600
Czech Republic	2.06	2.90	4571
Estonia	2.09	3.89	678
Hungary	3.87	5.04	6350
Latvia	3.21	7.69	1040
Lithuania	3.08	7.98	2182
Poland	2.38	10.58	19870
Romania	4.06	23.10	14869
Slovak Republic	3.36	2.89	1911
Slovenia	1.88	5.02	888
Average	3.02	7.59	5263

Source: based on World Bank's WDI (2019) and FAO database (2019)

The contribution of agriculture to both the exports and imports varies between the countries (*Table 2*). On the exports side, there are even larger differences from 6.18% (Czech Republic) to 30.61% (Latvia). Except for Lithuania, this ratio is below 20% in the other countries. Regarding imports, again Latvia spends the most on agricultural products (18.63%) followed by Lithuania and Croatia. On the other side, Hungary (7.12%), the Slovak and the Czech Republic can be found (7.23% and 7.34%, respectively).

Table 2. Share of agriculture in the trade, 2000-2017

Countries	2000-2005		2006-2011		2012-2017	
	Exports	Imports	Exports	Imports	Exports	Imports
Bulgaria	12.72%	6.71%	14.56%	8.87%	17.60%	10.91%
Croatia	14.25%	10.01%	14.82%	10.43%	18.22%	13.85%
Czech Republic	5.58%	6.77%	5.41%	6.85%	6.18%	7.34%
Estonia	14.59%	10.68%	14.87%	12.63%	16.19%	13.17%
Hungary	8.02%	4.76%	8.06%	6.11%	9.68%	7.12%
Latvia	33.82%	14.31%	28.55%	15.91%	30.61%	18.63%
Lithuania	15.02%	10.65%	19.01%	13.11%	21.03%	15.44%
Poland	9.72%	7.90%	11.42%	8.78%	14.10%	10.33%
Romania	6.52%	7.94%	8.40%	8.66%	12.21%	10.70%
Slovak Republic	5.41%	6.86%	5.45%	7.11%	5.28%	7.23%
Slovenia	4.82%	9.17%	6.73%	10.67%	8.08%	11.56%

Source: Calculations based on WTO (2019) database

Based on the size of agricultural exports and imports, agricultural trade balance can be calculated. It can be seen in *figure 1* that 6 out of the 11 NMS has agricultural trade balance, most notably the size of the Polish surplus earns attention. Taking into consideration the fact that Poland was a net importer of the agricultural goods before the accession, it a success story of how to use the financial resources of the Common Agricultural Policy efficiently (MIZIK ed., 2019). However, even without Poland, the NMS are self-sufficient as they export more agricultural goods than import.

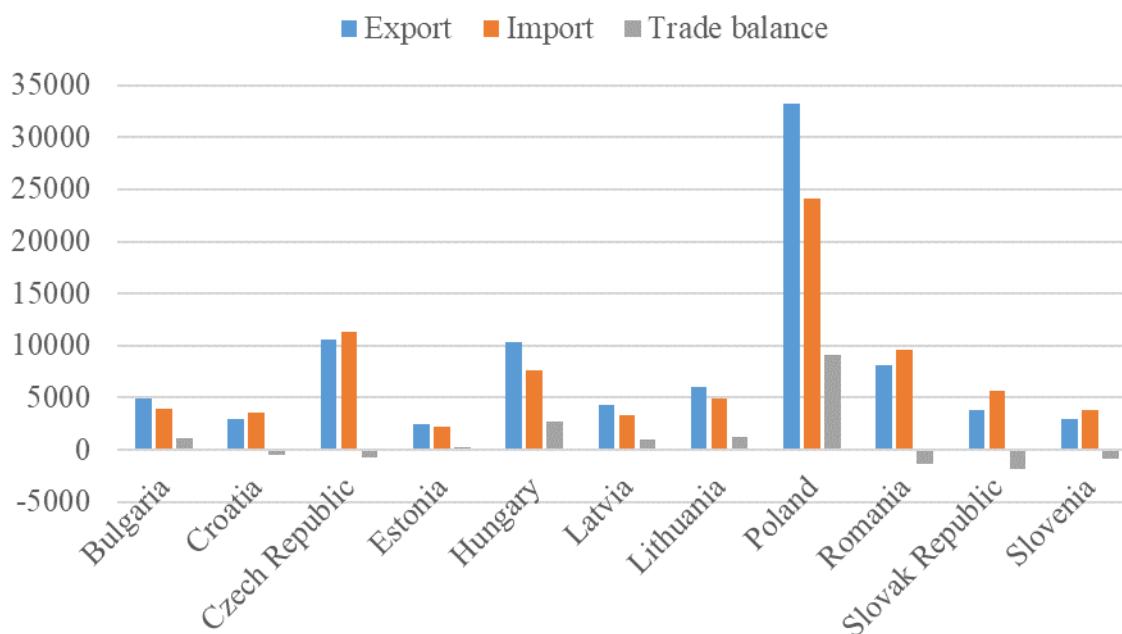


Figure 1. Agricultural trade of the NMS, 2017 (million current USD)

Source: Data is derived from WTO (2019) database

As the members of the single market, NMS are able to reach the Western markets as well. That is the reason why “regional” trade is on a relatively low level, it varies between 47.83% and 12.68% (*Table 3*). Mostly coffee and tea (chapter 9), animal or vegetable fats and oils (chapter 15) and live animals (chapter 1) are traded among the new member states. Except for the latter one, the two other chapters contain processed products. On the other side lac; gums, resins and other vegetable saps and extracts (chapter 13), cereals (chapter 10) and aquatic products (chapter 3) can be found. Compared to the other highlighted chapters, chapter 13 has an insignificant trade value. Overall, 26.76% of the total agricultural exports are traded within the NMS.

Table 3. Major characteristics of NMS’ agricultural exports, 2017

HS codes	Total agricultural exports (million USD)	NMS’ agricultural exports (million USD)	Share of NMS (%)
09	1328770	635537	47.83%
15	2569479	1061222	41.30%
01	1978736	773924	39.11%
11	1049784	410050	39.06%
17	2232750	834530	37.38%
22	4240728	1480756	34.92%
04	6124879	2061000	33.65%
23	3782565	1244903	32.91%
21	4535377	1413769	31.17%
08	2289652	692966	30.27%
14	12533	3723	29.71%
20	2590217	760361	29.36%
19	4629927	1347256	29.10%
16	3119607	883346	28.32%
18	3113574	848826	27.26%
07	2132512	556800	26.11%
02	7604599	1898986	24.97%
06	472596	91507	19.36%
12	4311248	778960	18.07%
05	539173	91899	17.04%
24	6334182	1048214	16.55%
03	2727409	381757	14.00%
10	8606055	1137115	13.21%
13	113753	14423	12.68%
Together	76440107	20451830	26.76%

Source: Calculations based on World Bank’s WITS (2019) database

Taking a closer look at the agricultural trade, more details can be revealed (*Table 4*). The major grain producers (Poland and Romania) sell most of their cereals to other than NMS countries. It explains its low regional share. The high Croatian extra-trade of aquatic

products (85.31%) resulted in a low regional share (14.69%). High intra-trade shares can be found in the Czech and the Slovak Republic due to their tight, historical and geographical connection. It explains the relatively high Baltic shares as well. Basically, the list of the top least and most regionally traded products highly overlapped with the export structure of the most significant regional producer, as well as exporter, Poland. Due to its size, Poland is not able to sell its products on this relatively small market, which resulted in the lowest regional intra-trade shares.

Table 4. TOP3 shares of NMS' extra- and intra-trade, 2017 (%)

Countries	TOP3 extra-trade chapters			TOP3 intra-trade chapters		
Bulgaria	0.00 (14)	8.13 (24)	8.70 (10)	64.42 (9)	44.60 (18)	38.50 (22)
Croatia	10.78 (10)	11.42 (12)	14.69 (3)	92.38 (14)	51.81 (7)	51.77 (17)
Czech Republic	10.18 (13)	14.70 (24)	16.39 (10)	80.63 (16)	79.11 (7)	78.94 (8)
Estonia	0.53 (14)	1.32 (18)	2.87 (6)	62.27 (11)	60.45 (4)	53.99 (1)
Hungary	10.16 (24)	10.72 (5)	19.06 (12)	74.26 (11)	67.65 (9)	52.75 (6)
Latvia	8.88 (22)	9.24 (10)	11.42 (12)	87.48 (24)	85.32 (9)	81.91 (8)
Lithuania	1.48 (6)	4.41 (14)	9.95 (3)	84.30 (1)	65.84 (17)	65.63 (15)
Poland	3.19 (10)	4.72 (3)	9.33 (5)	43.33 (15)	28.47 (22)	26.83 (9)
Romania	4.75 (10)	5.65 (7)	6.19 (14)	66.70 (17)	47.05 (9)	46.95 (18)
Slovak Republic	23.14 (6)	37.85 (10)	49.21 (4)	99.42 (14)	97.96 (3)	93.75 (16)
Slovenia	4.16 (13)	5.92 (1)	6.74 (10)	71.95 (23)	71.17 (3)	65.24 (24)

Source: Calculations based on World Bank's WITS (2019) database

CONCLUSIONS

Based on the analysis above, the following conclusions can be made:

- Although it shows a decreasing trend, agriculture still plays a more important role in the NMS than in the OMS, especially in Romania.
- Agricultural export significantly contributes to foreign earnings, it gives more than 30% of the total export revenues in Latvia. The import side shows smaller differences, it varies between 18.63% (Latvia) and 7.12% (Hungary).
- 6 countries out of the analyzed 11 have a trade surplus and Poland is by far the greatest producer of the region. One of its major reason was the EU accession.
- Except for live animals, processed foods are traded between the NMS, while cereals are the most significant extra-traded commodities in terms of exports value.
- extra trade is high in Poland due to its high production and export capacity. Intra-trade is important among the Slovak and the Czech Republic, as well as in the Baltic countries due to some similar reasons like historic connection and geographical closeness.

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Annex 1. Description of the agricultural chapters

HS code	Product description
01	Live animals
02	Meat and edible meat offal
03	Fish and crustacean, mollusc and other aquatic invertebrates
04	Dairy produce; birds' eggs; natural honey; edible products of animal origin, not elsewhere specified or included
05	Products of animal origin, not elsewhere specified or included
06	Live tree and other plants; bulb, roots and the like; cut flower and ornamental foliage

07	Edible vegetables and certain roots and tubers
08	Edible fruit and nuts; peel of citrus fruit or melons
09	Coffee, tea, maté and spices
10	Cereals
11	Products of the milling industry; malt; starches; inulin; wheat gluten
12	Oil seeds and oleaginous fruits; miscellaneous grains, seeds and fruit, industrial or medicinal plants, straw and fodder
13	Lac; gums, resins and other vegetable saps and extracts
14	Vegetable plaiting materials; vegetable products not elsewhere specified or included
15	Animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal or vegetable waxes
16	Preparation of meat, fish or crustaceans, molluscs or other aquatic invertebrates
17	Sugars and sugar confectionery
18	Cocoa and cocoa preparations
19	Preparation of cereal, flour, starch or milk; pastrycooks' products
20	Preparation of vegetables, fruit, nuts or other parts of plants
21	Miscellaneous edible preparations
22	Beverages, spirits and vinegar
23	Residues and waste from the food industries; prepared animal fodder
24	Tobacco and manufactured tobacco substitutes

Source: World Bank WITS database (2019)