Agricultural commodities and processed products ratio in the Romanian international agrifood trade

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SECTION 2

ECONOMICS, MANAGEMENT AND MARKETING IN AGRICULTURE

AGRICULTURAL COMMODITIES AND PROCESSED PRODUCTS RATIO IN THE ROMANIAN INTERNATIONAL AGRIFOOD TRADE

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Abstract

Romania's international agrifood trade increased significantly during the last decade, and mostly after the EU accession. Since 1990, the Romanian agrifood trade balance showed an almost continuous increasing deficit trend until 2008. In four years only, the trend reversed and in 2013, for the first time in the last two and a half decades, the agrifood trade balance turned positive. The present paper is analyzing the evolution of the trade evolution and its structure, separating the agrifood products in three categories: agricultural commodities, primarily processed products and secondary processed products. A higher ratio of processed products in exports is indicating an increased competitiveness, resulting from higher unit values incorporating more added value, and showing, at the same time, a higher development degree of the country's food industry. The results for total trade show that the processed products represented at most 46% of the Romanian exports, and at least 63% of imports, indicating a low-competitive structure of the agrifood trade. The analysis is detailed for intra and extra-EU trade and by main partners and groups of products.

Keywords: *agrifood trade, competitiveness, processed products*

INTRODUCTION

The agrifood sector is of major importance in the country's economy, due to its share in the GDP, production and contribution to the general trade. Despite having favorable soil and climatic conditions, since 1990, Romania needed continuously agri-food imports, in order to cover the domestic food demand. Imports have been far larger than exports, resulting in a continuous agrifood trade deficit.

Since accession, and even a few years earlier, the requirements of the Single Market imposed significant enhancements in the Romanian domestic agri-food production and processing. As a result, both exports and imports increased significantly, in value and quantity terms. The economic crisis introduced supplementary constraints in the sector, mostly in 2009. The increasing trend in imports was reversed, the exports intensified, and the result was the reversal of the agrifood trade balance trend. Consequently, the deficit diminished continuously since 2007, and in 2013, Romania achieved a positive agri-food trade balance, for the very first time in the last two and a half decades.

Several methods have been used to assess the Romanian agrifood trade competitiveness: trade balances (Gavrilescu, 2014); analysis of trade unit values (Gavrilescu & Voicilaş, 2014). An examination of the trade flows composition according to the degree of processing provides an interesting image of the country's capability to export products with a higher degree of processing, thus supplying high-value added products, more competitive and obtaining better prices.

MATERIAL AND METHODS

The general features of the Romanian agrifood trade are analyzed, in value terms, for exports, imports and trade balance. The analysis is performed for the total trade flows with agricultural and food products, as well as for the intra-EU trade.

In the literature there are many debates regarding the classification of agricultural products according to the processing degree. For example, Regmi et al. (2005) are grouping together as

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"high-value products" all horticultural products, processed and semi-processed products, as opposed to "bulk commodities ".

A more practical approach (Jankune and Wagner, 2014) is separating food products in three categories: agricultural commodities, primary processed products (or semi-processed products) and secondary processed products. The latter two categories combined give all processed products.

In the first category (agricultural commodities) are included (e.g.): live animals, live plants (trees, flowers), fresh fish, eggs, fresh vegetables, fresh fruits, cereals, oilseeds, tobacco leaves.

The primary processed products category includes: meat, liquid milk, cereal flour, edible oils, sugar, coffee, tea, dried fruits, frozen vegetables, animal feed (soybean cake). These products require minimal processing, and although they can be consumed as such, often they are used as raw material for other products with higher value added (secondary processed products).

Secondary processed products require more laborious industrial processing. Thus, in this category are included: yogurt, butter, cheese, chocolate, bakery and pastry, wine, food preparations (ex.: sausages, soups, sauces), pet food, cigarettes etc.

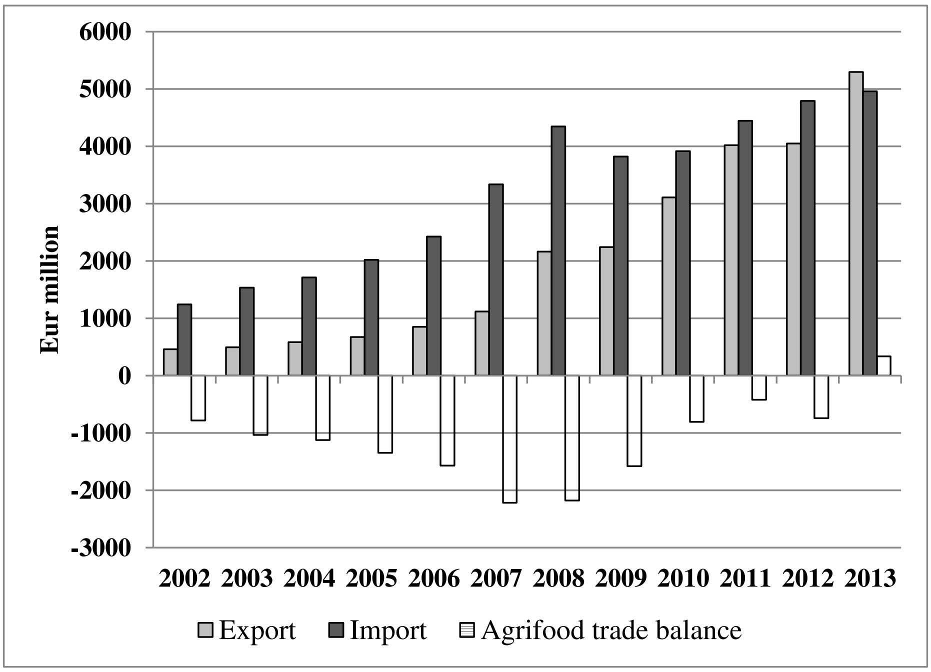
The separation of all agrifood products in the three above mentioned categories required detailed calculations at 4 digits level in the Combined Nomenclature Classification, for a total of 196 product subgroups.

RESULTS AND DISCUSSIONS

After EU accession, the Romanian agrifood sector started improving its efficiency and product quality along the food chains, aiming at improving its competitiveness on the international (intra- and extra-community) markets.

Nevertheless, as in the case of other new member states that joined the EU in 2004, it took Romania a couple of years to adapt to the new rules of the game. As a result, during the first 2 years, the agrifood total international exchanges increased considerably; therefore in 2008, the total value had doubled as compared to the last pre-accession year (2006). Although the exports increased continuously since 2002, the imports showed a faster pace growth, and, as a result, the agrifood trade deficit increased massively, to a historical peak of 2.2 billion EUR in 2007 (figure 1).

Figure 1 – Romanian total international agrifood trade (2002-2013)



Source: author's calculations using Eurostat data

The economic crisis showed its effects upon the agrifood trade on short term only, as a contraction of the total trade exchanges during one year 2009); afterwards, the upward trend resumed.

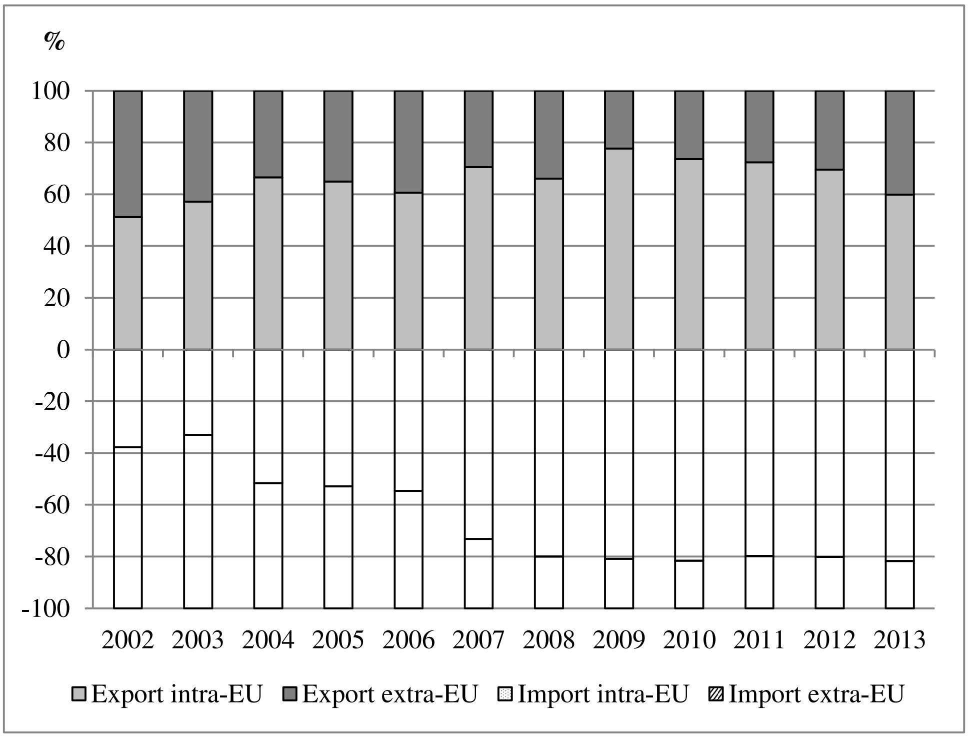
The free access on the Single market meant an important expansion of exports: after 2 years of membership, the export value was 2.5 times as compared to 2006. With the single exception of the crisis year (2009), the total exports increased continuously; in 2013 they reached EUR 5.3 billion, that is 6.2 times higher than in 2006.

Imports increased sharply immediately after accession, since the Romanian agrifood sector joined the EU with far lesser performances in terms of competitiveness; therefore the free access on the Single Market meant also a free penetration of cheaper products. In 2008, imports were almost double as compared to 2006, and more than double than the 2008 exports. The crisis year diminished the import value by 12%; and in the following year, the growth rate was rather modest: only 2.5% (2010/2009). In the subsequent years, imports increased, but at a much slower rate than the exports: in 2013 they were 2 times only larger than in 2006.

The result of these combined evolutions was a very dynamic trade balance: during the first two years after accession, it reached the highest deficit value ever recorded: EUR -2.2 billion. Starting with the crisis year, due to the higher pace of the export expansion, the trade deficit diminished almost continuously and quite rapidly: in three years only it diminished 5.2 times, from EUR -2.2 billion down to EUR -423 million. In 2013, the Romanian agrifood trade balance turned positive, for the first time in the last two and a half decades.

During the pre-accession period, the Romanian agrifood exports became more and more oriented to the EU (figure 2). The average ratio of intra-EU versus extra-EU exports has been (in percentage) 60/40 in the pre-accession period and 70/30 in the post-accession period, reaching the highest share in the total exports in 2009 (78%), to decrease subsequently down to 60% in 2013.

Figure 2 – Extra / intra-community ratio in the Romanian agrifood exports and imports (%)

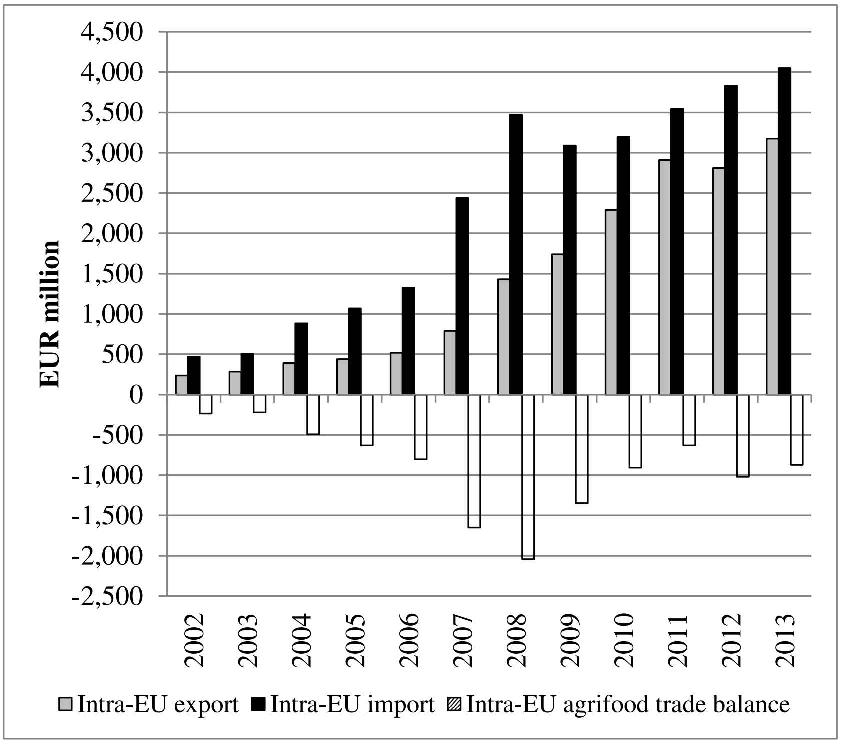


Source: author's calculations using Eurostat data

The imports came mainly from outside the EU during the pre-accession period (due mainly to existing (at that time) of some free trade agreements (such as with Republic of Moldova, Turkey, Israel etc.), that allowed imports at lower prices than from the EU. After accession, the import orientation shifted massively to the EU, due to the community prefernce rule. Thus, the average ratio of intra-EU versus extra-EU imports has changed from (in percentage) 46/54 in the pre-accession period, to 80/20 in the post-accession period, remaining quite unchanged for the last six years.

Yet, the evolutions are rather different in the intra-community and extra-community trade. The intra-community exports (figure 3) increased sharply immediately after accession: in 2007, they were 1.5 times higher than in 2006, and in 2008 they were already 2.8 times higher than in 2006. They increased continuously during the post-accession period, even in the crisis year, reaching the highest value in 2013 (EUR 3.2 billion).

Figure 3 – Romanian intra-EU agrifood trade (2002-2013)



Source: author's calculations on Eurostat data

Imports from the EU increased even more: 1.8 times in 2007/2006 and 2.6 times in 2008/2006. The crisis year resulted in an 11% decrease, but subsequently, the upward trend resumed, to reach the highest value in 2013 (EUR 4.1 billion).

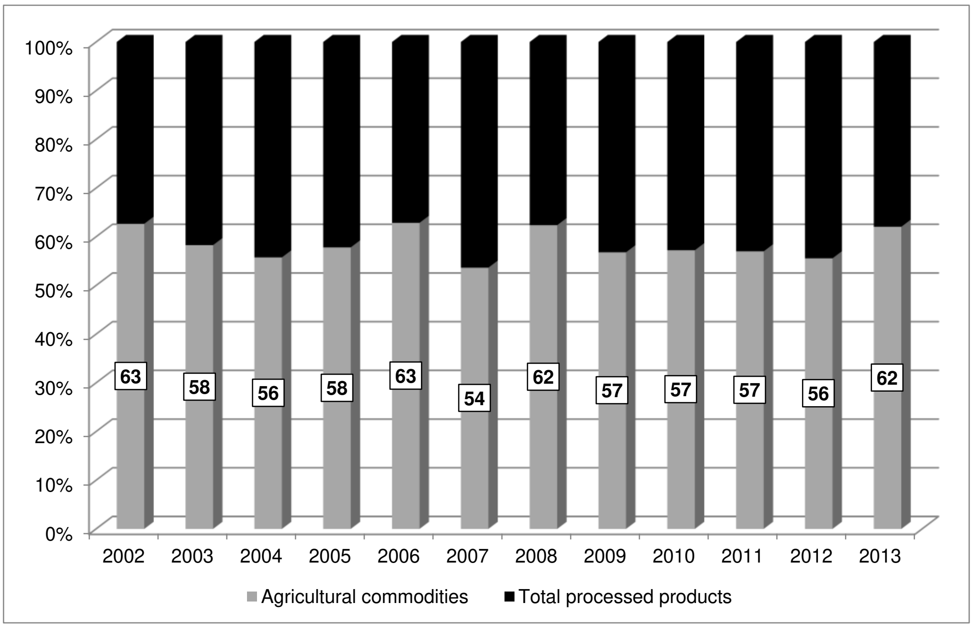
The trade balance in intra-EU exchanges has been continuously negative. The agrifood trade deficit doubled in the first year after accession, and reached the largest value in 2008 (EUR -2 billion, which represented 94% of the total agrifood trade deficit of the country. Since 2009, the intra-community agrifood trade deficit decreased significantly, to less than half in 2013/2008, due to the combined action of the export expansion and import contraction.

In the intra-EU trade, in 2013, Romania ranked 17 for export and 11 for import.

The top ten destinations of the Romanian agrifood products dispatches (exports) to other EU member states have been in 2011-2013 (average values): Italy, Hungary, Bulgaria, Netherlands, Spain, Germany, Greece, France, Belgium and Austria, accounting for 87 per cent of total dispatches to the EU member states.

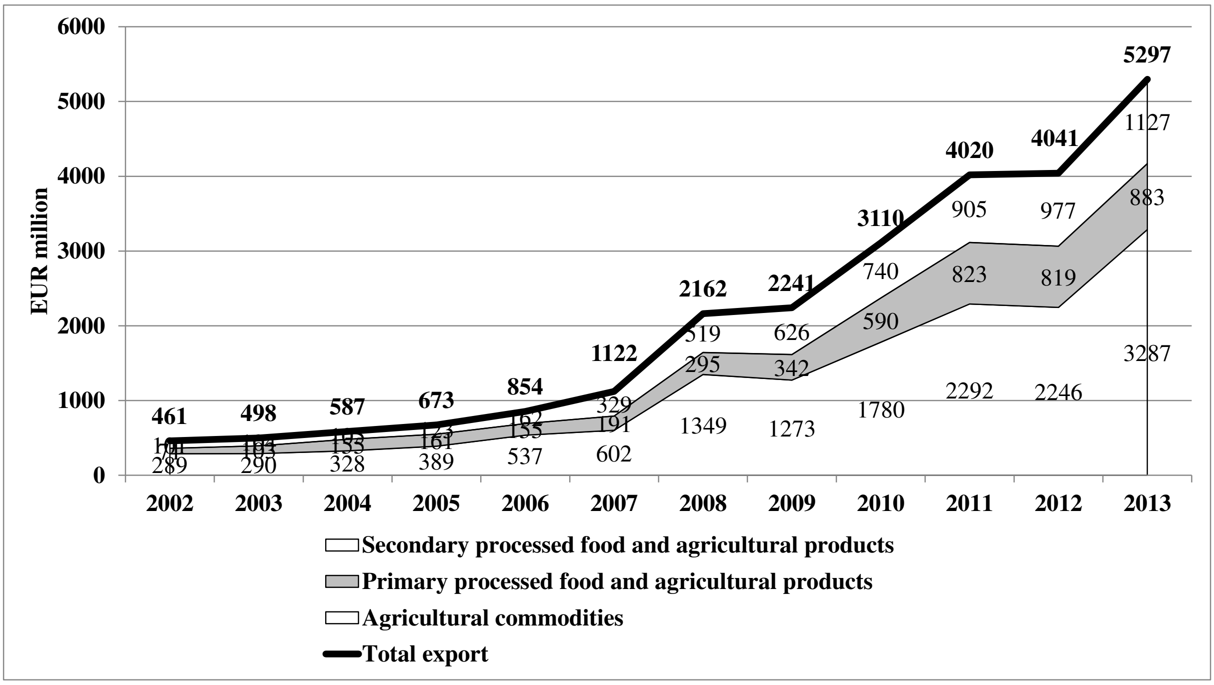
The analysis of the Romanian international agrifood trade by the degree of processing shows that during the whole analysed period (2003-2013), the agricultural commodities were prevalent in exports (54-63 per cent) (figure 4). The variation is given essentially by the yearly variations in the cereals and oilseeds exports. If we compare the average values for the pre-accession (2002-2006) and post-accession period (2007-2013), there is a significant increase in the export values: 5 times for the agricultural commodities, 4.4 times for the primary processed products and 6.3 times for the secondary processed products (figure 5).

Figure 4 – Share of agricultural commodities in agrifood exports (%)



Source: author's calculations using Eurostat data

Figure 5: The structure of the Romanian agrifood export according to the stage of processing (2003-2013)



Source: author's calculations using Eurostat data

When looking at the share between the three categories of products, a visible improvement is shown by the secondary processed products only, which increased from 20 to 25 %, at the expense of the primary processed products, while the share of the agricultural commodities remained almost unchanged (58%). In 2013, the share of the agricultural commodities increased to 62% due to exceptionally high cereals exports (table 1).

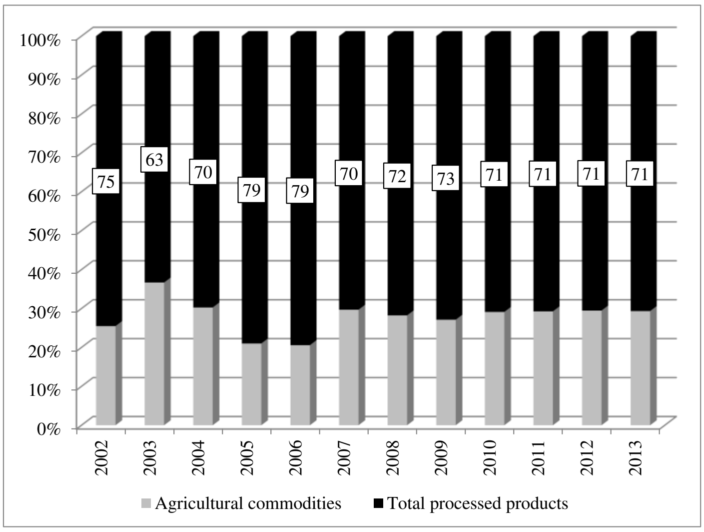
Table 1 – Structure of agrifood exports by the degree of processing (2002-2013) (%)

Item	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Agricultural commodities	63	58	56	58	63	54	62	57	57	57	56	62
Primary processed food and agricultural products	15	21	26	24	18	17	14	15	19	20	20	17
Secondary processed food and agricultural products	22	21	18	18	19	29	24	28	24	23	24	21
- total processed products	***37***	***42***	***44***	***42***	***37***	***46***	***38***	***43***	***43***	***43***	***44***	***38***
Total	100	100	100	100	100	100	100	100	100	100	100	100

Source: author's calculations using Eurostat data

In the post-accession period, the share of processed food imports decreased by 8% over 2005-2006, then maintaining a relatively constant level of about 71% (Figure 6).

Figure 6 – Share of processed products in agrifood imports (%)



Source: author's calculations using Eurostat data

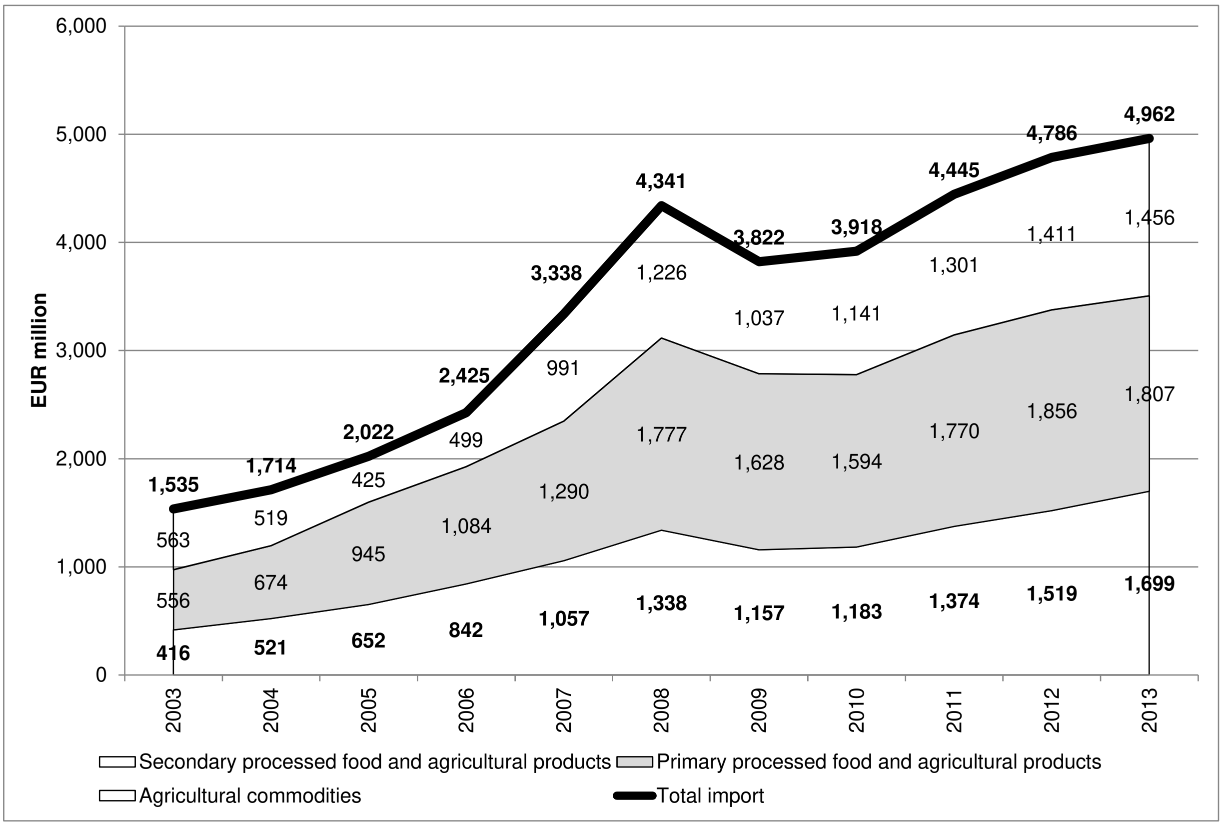
If we compare the average values of the pre-accession period (2002-2006) and post-accession (2007-2013), the increase in the value of imports was much slower, by half or even one third of the exports dynamics (Figure 7).

Thus, the share of primary processed products doubled, the secondary processed products increased 2.2 times, while that of agricultural commodities multiplied 2.5 times.

If in the structure of exports the agricultural commodities did not fall below 54% in the analyzed period, the imports did not exceed 30% (except in 2003, when drought has severely diminished production of wheat and barley and exceptional imports were needed to cover the domestic consumption) (Table 2).

After accession, only the trade balance for agricultural commodities has been continuously positive, thus diminishing the total deficit. The increase was sharp, by EUR 1.7 billion (that is 15 times in 2013 as compared to 2008).

Figure 7: The structure of the Romanian agrifood import according to the stage of processing (2003-2013)



Source: author's calculations using Eurostat data

Table 2 – Structure of agrifood imports by the degree of processing (2002-2013) (%)

Item	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Agricultural commodities	25	37	30	21	21	30	28	27	29	29	29	29
Primary processed food and agricultural products	46	36	39	47	45	39	41	43	41	40	39	36
Secondary processed food and agricultural products	29	27	30	32	35	32	31	30	30	31	32	34
- total processed products	***75***	***63***	***70***	***79***	***79***	***70***	***72***	***73***	***71***	***71***	***71***	***71***
Total	100	100	100	100	100	100	100	100	100	100	100	100

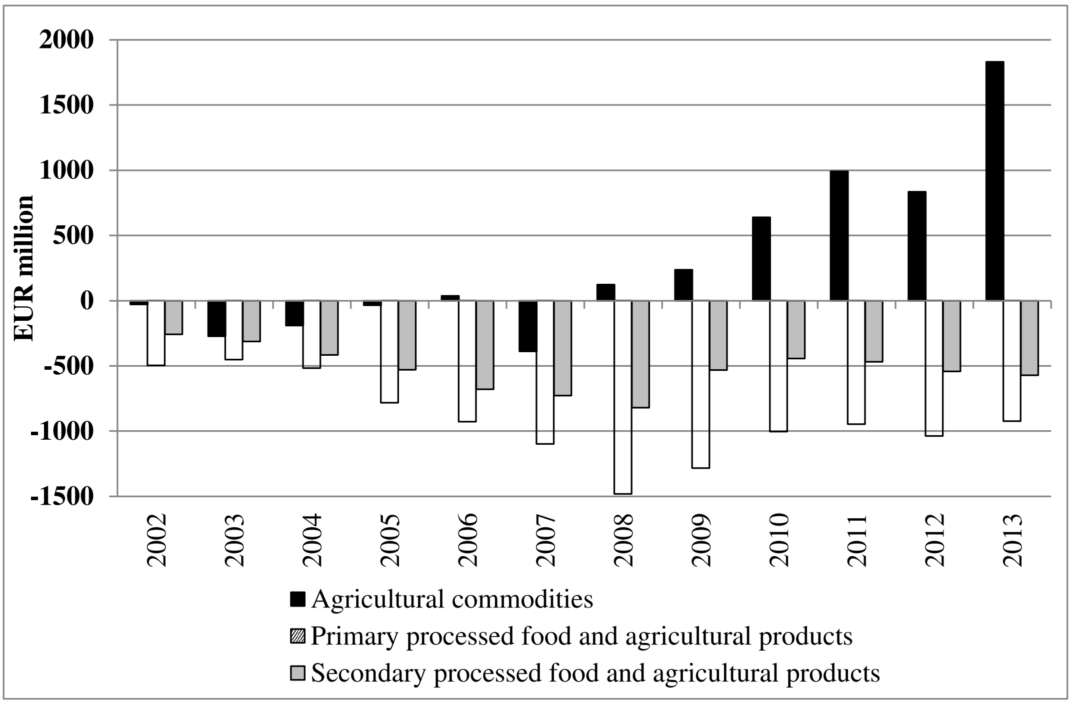
Source: author's calculations using Eurostat data

The trade deficit for processed (primary and secondary) products decreased significantly as well between 2008 and 2013, by 65 per cent (EUR 806 million).

When analysing the trade balance according to the processing degree, during the pre-accession period, all three products categories showed negative balances (figure 8).

After accession, only the agricultural commodities balance turned positive, thus contributing substantially to the reduction of the agrifood deficit. The increase was significant, by EUR 1.7 billion (in 2013 the value of agricultural commodities trade surplus was 15 times higher than in 2008). Cereals, oilseeds and live animals were the agricultural commodities that have sustained the upward trend of the agrifood trade balance.

Figure 8 – Structure of the agrifood trade balance by the processing degree



Source: author's calculations using Eurostat data

The trade deficit in primary processed products declined by 38% between 2008 and 2013 (that is EUR 806 million), while the deficit in secondary processed products decreased by 30% only, proving that for products with high added value, Romania continues be at commercial disadvantage.

CONCLUSIONS

In the post-accession period, Romania has made significant efforts to improve the efficiency and quality of its agrifood products and become a more significant player on the European and international markets. The result is that 7 years after accession only, Romania has become a net exporter of agricultural products, showing spectacular growth of export flows.

Also after accession, the ratio between agricultural commodities and processed products has improved. During the last three years, the average share of the processed products increased to more than half (56%), of which 25% semi-processed products and 30% products with high degree of processing. At the same time, the share of processed products in imports decreased by 10% in 2011-2013 as compared to the pre-accession period.

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