

ROMANIAN AGRI-FOOD TRADE PERFORMANCE AND COMPETITIVENESS IN ITS FIRST DECADE OF EU MEMBERSHIP

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Abstract: *The Romanian agri-food trade increased significantly since joining the EU. As compared to the 2006 (last year before accession), in the first membership decade exports increased 6.9 times and imports 2.5 times, diminishing the 2008 EUR 2.2 billion agri-food trade deficit as much as to turn positive in 2013-2014, just to shift subsequently again to a slight deficit. The paper is analyzing the changes occurred in this period in terms of value and quantities of traded goods, in the geographic orientation of the trade flows, as well as in their composition by main product groups using the unit value index method. Results show a net improvement in the trade performances, but still an unfavorable structure by products, with a low share of high value-added goods in exports. The last five years show a reorientation and concentration of an important part of main exports (cereals and live animals) to extra-EU destinations (such as Near and Middle East countries).*

Key words: *agri-food trade, Romania, EU membership, competitiveness, processed products*

INTRODUCTION

The international agri-food market has experienced major changes over the last 15 years due to the three waves of EU enlargement, as a result of the economic crisis in 2008-2009, and last but not least due to exchange rate developments between major world currencies [5].

The 2004, 2007 and 2013 enlargements have had a significant positive impact on the agri-food trade of the EU. The value of trade has grown in real terms, allowing it to preserve a place among the top players in the world agri-food market. The new Member States have contributed positively to the volume of traded goods but also negatively by contributing to the already negative balance of the old Member States [1, 11].

At the time of its accession to the European Union, Romania presented itself with a non-competitive agri-food sector, and hence non-competitive international trade compared to the other EU Member States, whether old (EU-15) or new (EU -13) [6].

Major foreign and domestic capital investments, the infusion of European funds through the NRDP and the alignment with EU requirements have allowed significant increases in the volume, efficiency and quality of the Romanian agri-food products. Free access to the Single Market has favored Romanian exports, at the same time requiring them to meet the quality required by EU rules but, on the other hand, allowed unrestricted access of Community products to Romanian markets, putting pressure on them, often less developed and less competitive.

MATERIALS AND METHODS

The international total, intra- and extra-EU international trade flows of Romania are analyzed. The analysis has been made on dynamic trends (export, import, trade balance), with an emphasis on the last 17 years (6 in pre-accession period, and 10 years of EU membership). The comparative composition of the agri-food trade flows, by product group at 2 digits-level in the harmonized system (chapters HS 01-24) is also analyzed, the modifications being highlighted using the unit value index method.

The data source for the calculations is Eurostat. For the identification of commodity groups, the NC classification (Combined Nomenclature) was used to 2 digits and 4 digits.

The analysis focused on the main groups of agri-food products, in terms of volume (quantities and values), as well as on the main directions: dispatches and introductions (intra-community), respectively exports and imports (extra-community).

RESEARCH RESULTS

At the beginning of the pre-accession period (2000), the agri-food trade volume was rather low: EUR 368 million in exports and 1.01 billion in imports. During the seven years of the pre-accession period (2000-2006), both the value of exports and imports increased 2.3 times. The coverage of imports by exports was as low as 35%, so the main feature of the agri-food trade was the fast increasing deficit, from EUR -647 million (in 2000) to -1.34 billion in 2006.

The removal of the export quotas and all custom duties when Romania entered the Single Market as EU member resulted in a significant increase of its general international trade: total exports increased 2.5 times (average values in the pre-accession period as compared to those in the post-accession period) (table 1), to reach EUR 57.4 billion in 2016, while the imports increased slower, only 2.2 times, to reach EUR 67.3 billion in 2016. The general trade balance has been negative all along these years, but with decreasing values after 2009. One can also notice a significant intensification of the agri-food trade as compared to the general trade: agri-food exports were 17 times higher in 2016 as compared to 2000, and imports 7 times only, indicating also an important reduction in the deficit of the sector.

Table 1

Changes in the Romanian general and agri-food trade

| Item | Flow | Pre-accession period average (2000-2006) (EUR billion) | Post -accession period average (2007-2016) (EUR billion) | 2007-2016 / 2000-2006 | 2016/2000 |
|-----------------------------|--------|--|--|-----------------------|-----------|
| Total general trade | export | 17.33 | 43.41 | 2.51 | 5.09 |
| | import | 24.47 | 54.82 | 2.24 | 4.73 |
| Total agri-food trade | export | 0.56 | 3.97 | 7.07 | 16.77 |
| | import | 1.62 | 4.76 | 2.95 | 6.69 |
| General trade with the EU | export | 11.80 | 31.26 | 2.65 | 5.99 |
| | import | 14.87 | 40.56 | 2.73 | 6.46 |
| Agri-food trade with the EU | export | 0.33 | 2.63 | 7.99 | 21.87 |
| | import | 0.72 | 3.85 | 5.38 | 17.72 |

Source: author's calculations using Eurostat data [3]

The free access on the Single Market, as well as the devaluation of the national currency (between 2007 and 2009, RON depreciated by 27% against the EUR) were factors favoring the exports to the EU (figure 1). Similarly, the 33% devaluation of the RON against the US dollar in 2011-2016 and the significant penetration on the Mediterranean and Middle East markets favored growth in exports to extra-EU destinations [8].

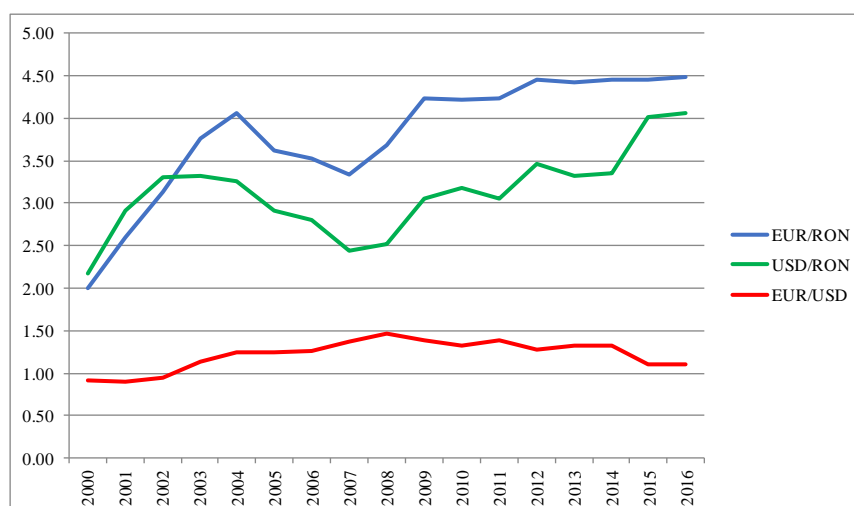


Figure 1. Romanian exchange rate (RON/EUR/USD)

Source: National Bank of Romania [16]

The increase in export value was mainly the consequence of a significantly higher volume of marketed products and, to a much lesser extent, the consequence of price increase, both for aggregated level (total agri-food products - chapters 01-24 NC) and for the majority of chapters (2 digits NC) (table 2).

The year 2006 was chosen as a basis for reporting, as it is the last year before Romania's accession to the EU and signs of the economic and financial crisis were present.

For most product groups, volume indices are higher than price indices, indicating an increase in the quantities of goods exported during the period 2007-2016 compared to the base year 2006. Significant increases in the volume of exported goods are highlighted in: cereals, meat (beef and poultry), fish, and among the processed products, tobacco and tobacco products, dairy products, milling industry products, bakery and pastry products, meat products.

Table 2
Volume and price index for the Romanian agri-food exports (2016/2006)

| Export | | Product group (HS chapter) | Import | |
|--------------|-------------|-------------------------------------|--------------|-------------|
| Volume index | Price index | | Volume index | Price index |
| 197.3 | 119.0 | 01-live animals | 350.8 | 86.3 |
| 1634.9 | 85.2 | 02-meat | 76.4 | 67.2 |
| 1164.1 | 99.9 | 03-fish and seafood | 107.4 | 43.9 |
| 556.7 | 81.0 | 04-dairy products, eggs and honey | 822.2 | 119.7 |
| 786.1 | 42.2 | 05-other animal products | 167.7 | 103.7 |
| 40.1 | 443.6 | 06-live plants | 214.5 | 73.7 |
| 340.3 | 70.2 | 07-vegetables | 147.4 | 32.8 |
| 99.2 | 125.5 | 08-fruit | 142.7 | 45.8 |
| 69.3 | 676.2 | 09-coffee, tea and spices | 111.1 | 49.0 |
| 912.5 | 155.3 | 10-cereals | 1014.3 | 110.7 |
| 1134.3 | 139.9 | 11-products of the milling industry | 160.7 | 78.6 |
| 318.9 | 187.5 | 12-oilseeds | 567.3 | 116.6 |
| 795.7 | 51.4 | 13-lacs, gums and resins | 174.9 | 60.8 |
| 33.3 | 284.0 | 14-other vegetable products | 193.0 | 72.2 |
| 239.8 | 133.1 | 15-oils and fats | 149.8 | 62.2 |
| 441.2 | 129.2 | 16-meat and fish preparations | 247.4 | 54.2 |

| Export | | Product group (HS chapter) | Import | |
|--------------|-------------|--------------------------------------|--------------|-------------|
| Volume index | Price index | | Volume index | Price index |
| 216.6 | 133.2 | 17-sugar and confectionery | 81.6 | 59.1 |
| 454.1 | 185.1 | 18-cocoa and cocoa products | 254.3 | 57.2 |
| 417.8 | 126.3 | 19-cereal baking and pastry products | 434.5 | 96.3 |
| 232.6 | 148.5 | 20-vegetable and fruit preparations | 165.8 | 73.4 |
| 208.5 | 345.2 | 21-miscellaneous edible preparations | 186.0 | 78.5 |
| 283.3 | 108.2 | 22-beverages | 290.9 | 99.1 |
| 354.2 | 297.0 | 23-animal feed | 294.9 | 93.8 |
| 1795.3 | 411.1 | 24-tobacco and tobacco products | 149.9 | 127.3 |
| 584.2 | 117.7 | TOTAL AGRI-FOOD PRODUCTS | 214.5 | 85.3 |

Source: author's calculations using Eurostat data [3]

The product groups for which, on the contrary, unit export prices were the main determinants of the increase in the value of exports during the post-accession period were: coffee, tea and spices; preparations of vegetables or fruit; various food preparations; animal feed; live plants and floriculture products.

The quantities of imported products increased in almost all product groups. But there are two important exceptions: meat and sugar.

These two product groups have been for years the top import articles, but in the post-accession period, imported quantities have continued to decline, which can be correlated with a decrease in annual average per capita consumption:

- for meat, meat products and edible meat (in fresh meat equivalent), annual average per capita consumption decreased from 71.2 kg in 2006 (maximum value of the period) to 57.5 kg in 2013 (minimum value of the period);

- for sugar and sugar products (in refined sugar equivalent), the annual average per capita consumption decreased from 29.5 kg in 2006 to 21.1 kg in 2013 [9, 10].

At the same time, one can notice a continuous trend of industrial domestic production of meat, meat preparations, canned meat, but also sugar and sugar products during 2006-2016, which also contributed to the decrease of the imported quantities. Unit import prices have fallen for these product groups as well [13].

In fact, for almost all imported products, unit import prices decreased in the post-accession period compared to 2006. There are few exceptions: dairy products, tobacco and tobacco products, cereals and oilseeds.

However, the massive fall in prices for imported vegetables and fruits (by 54-67% compared to 2006), which, correlated with the increase in imported quantities, shows the lack of competitiveness of the Romanian branches in these product groups.

As EU member, Romania entered much better the international agri-food products markets (both intra and extra-EU markets): if 2006 the agri-food exports accounted for 3.3% of the general Romanian exports, until 2016 their share tripled (10.8%); for imports, the share increased from 5.9% to 10.1% (figure 2).

During the transition and the pre-accession period, the agri-food trade balance has been permanently negative, and the deficit grew massively in the first two years of membership, reaching a historical peak in 2008 (EUR -2.2 billion). Similar phenomena occurred in most of the New Member States immediately after accession, that is an imbalance in their trade, as a result of the adapting to the new „rules of the game” [4].

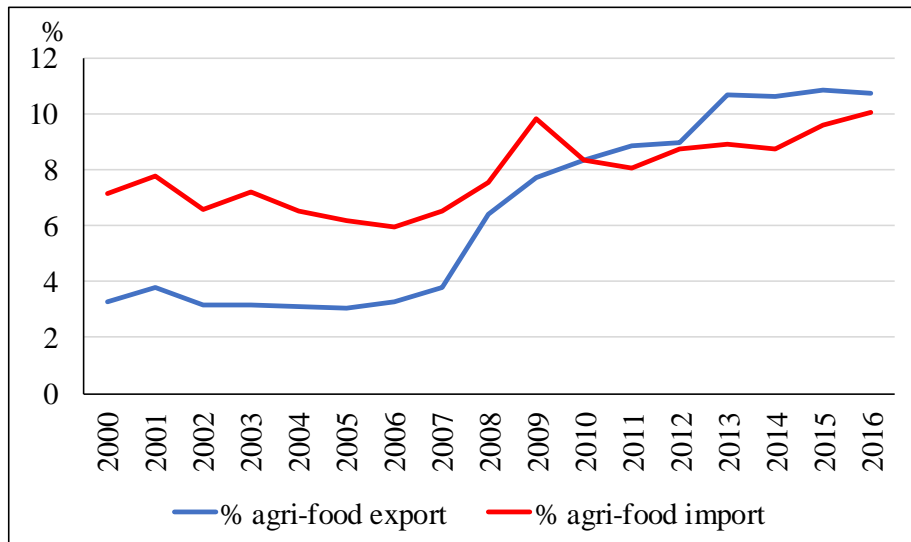


Figure 2. Share of agri-food trade in the general Romanian international trade
 Source: author's calculations using Eurostat data [3]

The economic crisis affected Romania mostly in 2009, when the agri-food imports dropped by EUR 519 million due to a contraction of demand which resulted from the increased unemployment and reduced incomes of the population. Nevertheless, the import upward trend resumed since 2010, but at a much slower pace than for exports.

The slower growth rate of imports as compared to exports resulted in a diminishing agri-food trade deficit in 2009-2012. In 2013-2014, the trade balance became positive (up to EUR +455 million), to shift again to slightly negative in 2015-2016 (figure 3).

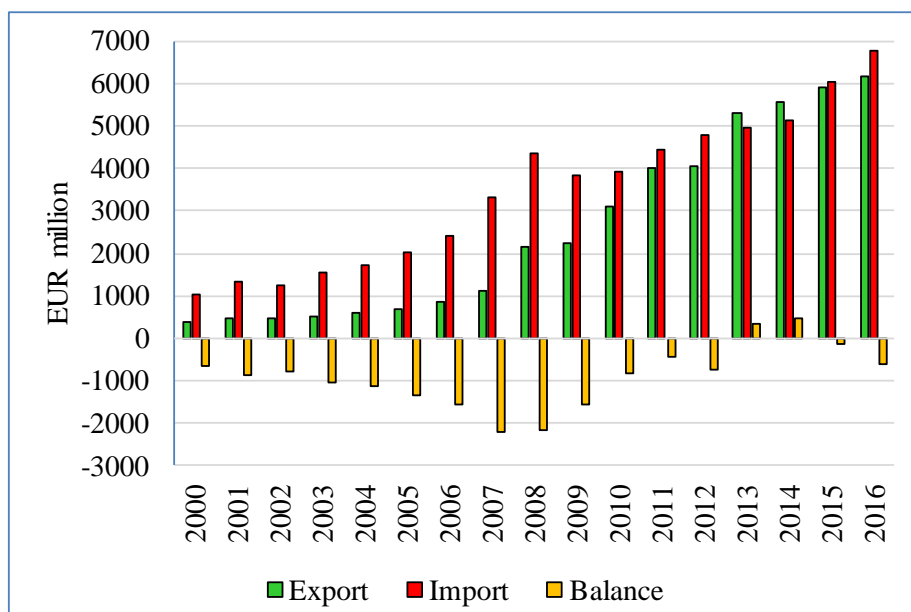


Figure 3. Romanian agri-food trade (2000-2016)

Source: author's calculations using Eurostat data [3]

In the pre-accession period, Romania benefitted from its Association Agreement with the EU, as part of the preparation time for becoming a member state. Therefore, its exports turned to the EU in particular: 59% (average 2000-2006); the share increased in the first years of membership 72% (average 2007-2011) (Figure 4), then diminished to 64% in

2012-2016, when the Romanian exports of cereals, oil and live animals turned massively towards the Near and Middle East.

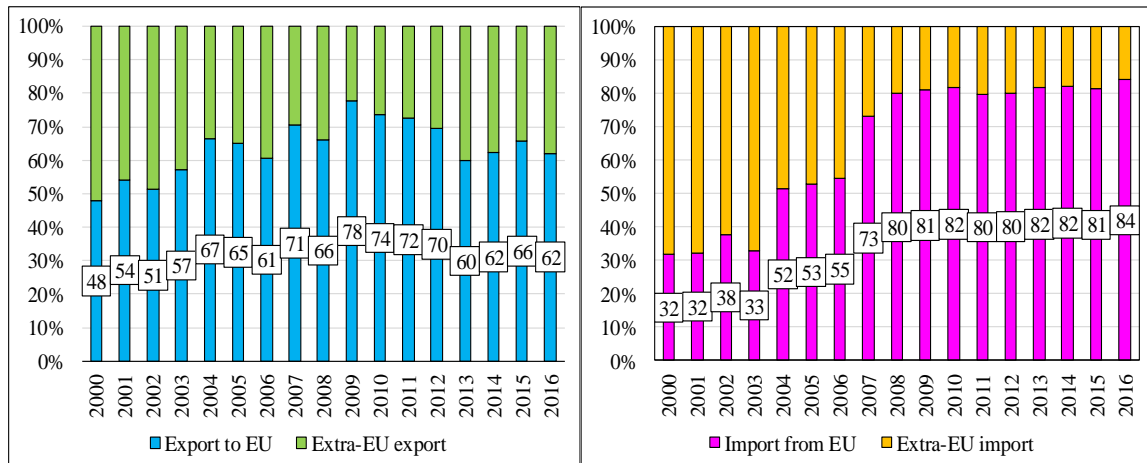


Figure 4. The EU-orientation of the Romanian agri-food trade flows (2000-2016)

Source: author's calculations using Eurostat data [3]

The export value to the EU increased 8 times after accession as compared to 2000-2006, reaching a maximum of EUR 4.9 billion in 2015. Although the import value growth rate has been lower (only 5.4 times), in absolute terms it remained significantly higher, with a peak of EUR 5.7 billion in 2016. The resulting trade deficit between Romania and EU reached its highest in the first years after accession, contributing to the total agri-food deficit by 74% in 2007 and by 94% in 2008. The deficit on the EU relationship diminished subsequently from the peak of 2008 (EUR -2.2 billion) to a minimum of EUR 0.6 billion in 2011, but increased again afterwards and reach EUR 1.9 billion in 2016. The Romanian agri-food products are not yet competitive enough on the Single Market; as a result, the trade balance on the EU relationship remained permanently negative (Figure 5).

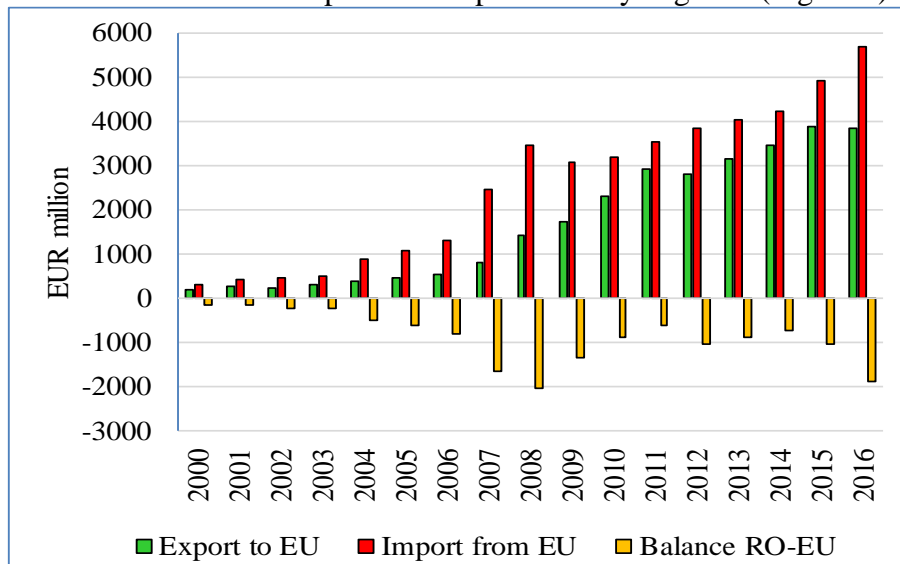


Figure 1. Romanian agri-food trade with the EU (2000-2016)

Note: EU-15 in 2000-2003; EU-25 in 2004-2006; EU-27 in 2007-2012; EU-28 in 2013-2016

Source: author's calculations using Eurostat data [3]

In the pre-accession period, the main intra-EU export partners for Romania were Italy, Germany and Spain, after accession, Italy remained the first destination, with Bulgaria and the Netherlands ranking second and third (table 3).

Table 3

Rank and share (%) of the top five EU partners for the Romanian agri-food trade

| Rank | Average 2002-2006 | | Average 2007-2010 | | Average 2011-2016 | |
|---------------|-------------------|------|-------------------|------|-------------------|------|
| EXPORT | | | | | | |
| 1 | Italy | 24.2 | Italy | 24.9 | Italy | 21.2 |
| 2 | Greece | 13.7 | Bulgaria | 12.0 | Hungary | 11.4 |
| 3 | Germany | 12.9 | Spain | 9.1 | Bulgaria | 11.2 |
| 4 | Spain | 8.7 | Hungary | 8.6 | Netherlands | 8.9 |
| 5 | Croatia | 7.5 | Netherlands | 8.5 | Spain | 8.8 |
| IMPORT | | | | | | |
| 1 | Germany | 18.1 | Hungary | 21.2 | Hungary | 20.2 |
| 2 | Hungary | 10.5 | Germany | 15.7 | Germany | 16.7 |
| 3 | Austria | 10.5 | Netherlands | 10.4 | Bulgaria | 11.3 |
| 4 | Netherlands | 9.8 | Bulgaria | 9.1 | Poland | 9.3 |
| 5 | France | 9.5 | Italy | 7.7 | Netherlands | 8.6 |

Source: author's calculations using Eurostat data [4]

Before accession, Romanian imports from EU originated mainly from Germany, Hungary and Austria, while after accession, the main EU suppliers became Hungary, Germany and Poland.

Among the old member states, after accession, Romania registered positive trade balances with Greece, Ireland, Italy, Portugal, Spain and UK. Although exports increased to the new member states (NMS-13) 6.7 times and imports 5.4 times, Romania shows trade deficit with all of them [12].

If we look at the trade performance of the 28 EU member states, only 10 of them have themselves a positive trade balance: 6 countries from the old member states (Belgium, Denmark, France, Ireland, the Netherlands and Spain) and 4 Central and Eastern European countries (Bulgaria, Hungary, Lithuania and Poland). The last two ones shifted to trade excedent after their accession to the EU.

Among the NMS, Poland has achieved the best performance in international trade, with a steady positive growth since 2003. Despite some fluctuations, Hungary also managed to maintain a positive balance in the post-accession period, as did Bulgaria. A surprising presence in the NMS group with positive balances is Lithuania, which has managed to recover quite well (like Poland) after the losses caused by the Russian embargo on agri-food trade with EU countries, given the relatively high share of Russia in the exports of these two countries in the pre-embargo period (August 2014) [2, 7].

The composition by main product groups of the Romanian agri-food trade with the EU changed significantly in the last two decades: cereals and oilseeds exports intensified (their share in the total exports to the EU increased from 29% before accession to 74% after accession), while the share of live animals, animal feed, fats and oils (combined) diminished from 40% before accession to 4% after accession (they reoriented towards the Arabic countries). The main imports remained roughly the same: sugar, animal feed and fruits.

Both exports and imports concentrated since 2007: the first five groups of products account for 87.4% of total exports to the EU, respectively 58.6% for imports from EU. This reduction in the degree of diversification of trade may prove unfavorable, however, if disturbances occur in the European or world markets of those products.

The Romanian agri-food trade with non-EU countries continued also after accession, especially with the countries with which Romania used to have preferential trade agreements before 2007 (such as Turkey, Moldova, Israel). Although in the first

years after accession the imports decreased due to the enforcement of the principle of community preference, in the following years Romanian exports to extra-European destinations increased significantly: in 2007-2012, the average value of extra-EU exports tripled compared to the pre-accession average and in the period 2013-2016 the average value was 8.5 times higher than in 2000-2006. This evolution was possible due to Romania's strong entry of grain exports on the Egyptian, Jordanian and Libyan markets.

Since 2010, the agro-food trade balance with the extra-EU countries has become positive, and the trade surplus has steadily increased, reaching a maximum of EUR 1.3 billion in 2016 (figure 6).

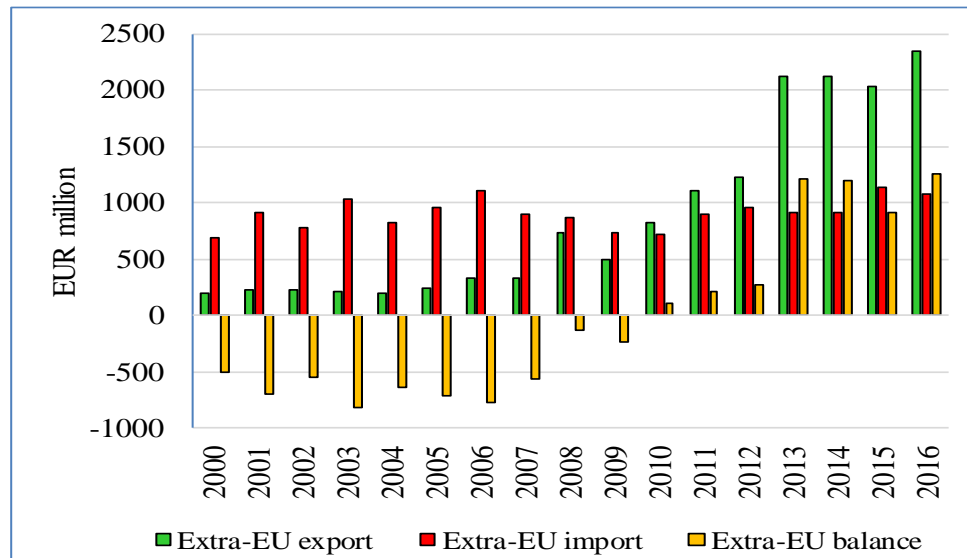


Figure 6. Romanian agri-food trade with non-EU countries (2000-2016)

Source: author's calculations using Eurostat data [3]

While before accession, the top four destinations for the Romanian extra-EU exports were Turkey, Pakistan, Moldova and the Russian Federation, after 2007 the export flows shifted to Egypt, Jordan, Libya and Turkey; these four destinations absorbed in 2016 exports worth EUR 872 million EUR, that is 9.4 times higher than in 2006.

The range of products is very narrow: cereals, live animals, oilseeds and animal feed: in 2003-2006 they accounted for 68% of the value of exports; in 2013-2016, their cumulative share rose to 95%.

Over 2/3 of all Romanian exports of live animals, animal and cereal fodder are heading to destinations outside the EU [9]; of these, the Mediterranean countries accumulate the most significant part: 92% for live animals, 82% for animal feed and 64% for cereals.

CONCLUSIONS

At the time of joining the EU, the Romanian agri-food sector of Romania was uncompetitive, as proven by a 35% degree of import coverage by exports and a huge trade deficit.

The Romanian and foreign capital investments and the financial infusion through the CAP tools allowed for important increases in the volume, efficiency and quality of agricultural and food products; adding to that the free access on the Single Market the result was, in the 10 years since accession, a significant increase in exports and imports and a massive reduction of the agri-food trade deficit.

Throughout the analyzed period, Romanian exports have focused mainly on the EU. Although exports to the EU have increased significantly, Romanian agri-food products are not yet competitive enough on the Single Market; as a result, the trade balance on the EU relationship remained permanently negative. The main export destinations are Italy and Bulgaria, and our main suppliers of agri-food products are Hungary, Germany and Poland. Products exported to the EU are cereals (maize and wheat), oilseeds (rape and sunflower) and live animals, accounting for 80% of the value of exports to member countries. Imports from EU are mainly sugar, animal feed, tobacco, fruit, meat and processed products.

Romanian exports to non-EU countries also grew significantly over the pre-accession period, while imports remained at about the same level; as a result, the trade deficit has fallen rapidly, and since 2010 the balance on the extra-EU relationship has become positive, the surplus rising every year. After accession the Romanian extra-EU exports shifted from Moldova and Turkey to the Middle East (eg Egypt, Jordan, Libya), to which cereals (wheat and maize), oilseeds (sunflower) and live animals (sheep) are massively exported. From outside the EU, Romania mainly imports sugar, soybeans, raw tobacco, fruit and vegetables.

Romania's agri-food trade primary targets should be in the following period [14, 15]: diversification of exports, increasing exports of high quality products (wines, horticultural products, organic products, traditional processed products, etc.), diminishing the share of basic agricultural exports in favor of processed products; reducing the imports of basic food (meat, vegetables, fruits) and replacing them with products obtained in the country.

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