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# **Post-Accession Changes in the Agri-Food Products' Quality and Terms of Trade - Empiric Evidences from Romania**

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*ABSTRACT - The paper aims to capture post-accession effects of Romania's integration in the common market upon the external performances of the agricultural products; the analysis of intra-Community agri-food trade, by commodity groups, highlighted the existing opportunities of the products with expressed export potential and the areas affected by the net imports. The calculation of the relative unit value indices provided the bases for assessment of the quality of Romanian agricultural traded products, resulting empiric evidences upon the level of integration of the agricultural trade flows and post-accession evolution, i.e. deterioration or improvement, of their terms of trade.*

## **OBJECTIVE AND METHODS**

The paper aims to evaluate post-accession effects reflected in the performances/shortcomings of Romania's agri-food trade development within the EU-27 Common Market during the period 2007-2010, as well as sensitive areas of the Romanian food sector which can be particularly exposed to the global crisis. Quantitative and qualitative analysis of the Romanian foreign agri-food trade after the accession have been carried out in this purpose.

Given that the importance of the EU has been continuously increasing in Romania's foreign trade since the early pre-accession period, the evaluations performed by product groups on intra-Community agri-food trade highlighted both existing opportunities of the products with expressed export potential and areas affected by the net imports respectively,.

The methodology of assessment vertical or horizontal integration of the agri-food trade deals with the analysis of the commercial food quality, through the calculation of relative unit value indices (1). Analyses covered products grouped by chapters of the Combined Nomenclature (CN). The assessments comprised the quality - low (poor) or high - of the county's exports in relation to imports, by the range of the relative unit values within the classification thresholds of +/-15% (2). In this way, it is assessed whether the products are horizontally integrated (homogeneous), when the unit value index of trade flows is included in the 0.85 to 1.15 interval. The vertical differentiation can be assessed when the unit denominations of the export and import flows does not fall in the margin +/-15%; it corresponds to different qualities and prices traded products belonging to the same sector, determined by the levels of factors endowment creating comparative advantages.

## **RESULTS AND DISCUSSIONS**

During the previous two decades, the performance of the Romanian agri-food sector has been influenced by changes in the sector brought about by the internal reforms of political transition to market economy, restructuring and institutional adjustments needed for the CAP adoption and integration into the common market arising from EU membership (3). In the period 1999-2006, Romania was on the way of intense preparation of its accession to the EU.

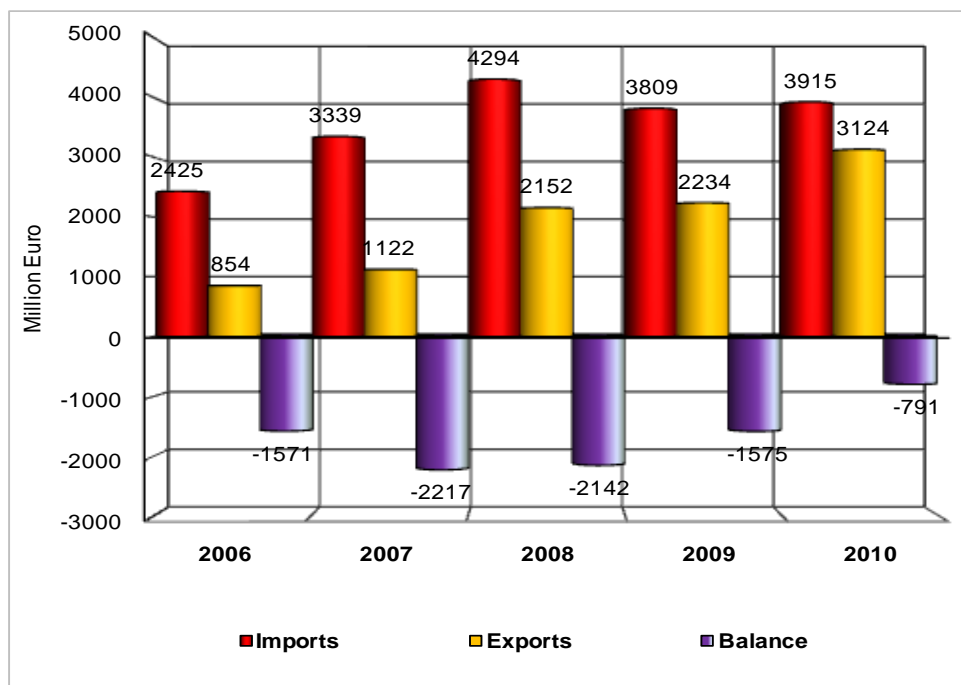
In the pre-accession period, the agri-food trade between Romania and the Member States developed under the influence of the European Agreement on agriculture and EU became Romania's main trade partner.

In 2007 Romania obtained the membership status, while the agri-food exports on the intra-Community market contributed to the increase of 9.7% in the gross value added in Romania's agriculture. The most significant trade partners, in terms of agri-food export and import flows' values, have mainly been Italy, Germany, Spain, Greece, Hungary, France, and Netherlands, followed by Belgium, Austria and Poland.

As a general feature, the annual variation of trade over the last year before the accession showed a greater increase of imports than exports, the increase in European products competition as a result of the first enlargement to the central and east European countries, but also a trade creation effect on the common internal market.

Under the influence of the internal and external developments in the domestic economy subsequent to the EU accession, the period 2007-2010 has been reflected in the country's foreign trade by an intensification of both import and export flows, yet Romania remaining a net agri-food importer since 1990.

The total agricultural trade experienced a growth compared to 2006, i.e. it doubled from 4.4 to 6.4 billion Euros in 2008 and reached 7 billion Euros in 2010. As well, the importance of agri-food exports in GDP in the agricultural sector increased from 15.6 % in 2007 to 24.5% in 2008 and 30.7% in 2009.



Source: author's processing of EUROSTAT statistics (4)

**Chart 1. Trends in Romania's agri-food foreign trade**

The annual exports significantly increased, accounting for 1.122 billion Euros in 2007 and almost doubled afterwards, reaching 2.2 billion Euros in 2009 and heat up to 3,1 billion in 2010.

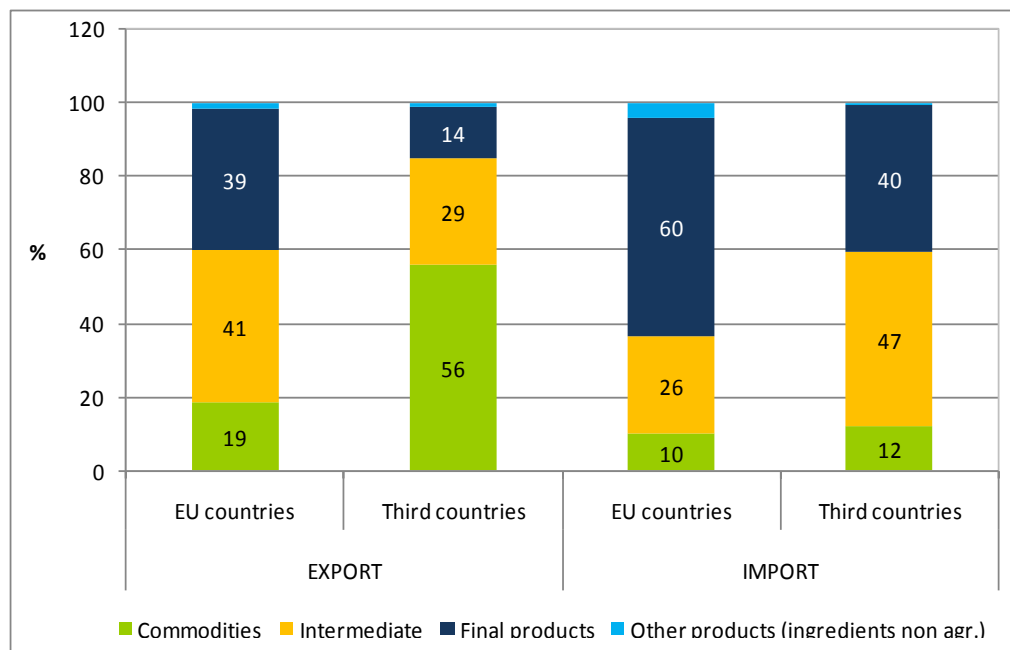
Imports boosted from 3.3 billion Euros in 2007, up by 37% compared to 2006, to a historical record value of 4.3 billion Euros in 2008. A slight decrease followed, so that in 2010 the value of imports reached 3.9 billion Euros.

Romania's agri-food trade balance drastically deteriorated, reaching a significant deficit of over 2 billion Euros in 2007 has been experienced a certain contraction trend, in 2010 respectively, accounting -791 millions Euro.

The trade deficit was mainly due to the products included in section IV- Prepared foodstuffs, beverages and tobacco (46% of the trade balance) - whose exports totalled 704 millions Euro while their imports 1.5 billion Euros, and in section I - Live animals and animal products (43% of the balance), accounting for 326 millions Euro exports and 1.1 billion Euros imports.

EU has been the main trading partner for over a decade; in the post-accession period, EU countries represented 71-74% of food export destinations of Romania; at the same time, the import share continually raised, from 55% in 2006, to 73% in 2007 and up to 83% in 2010.

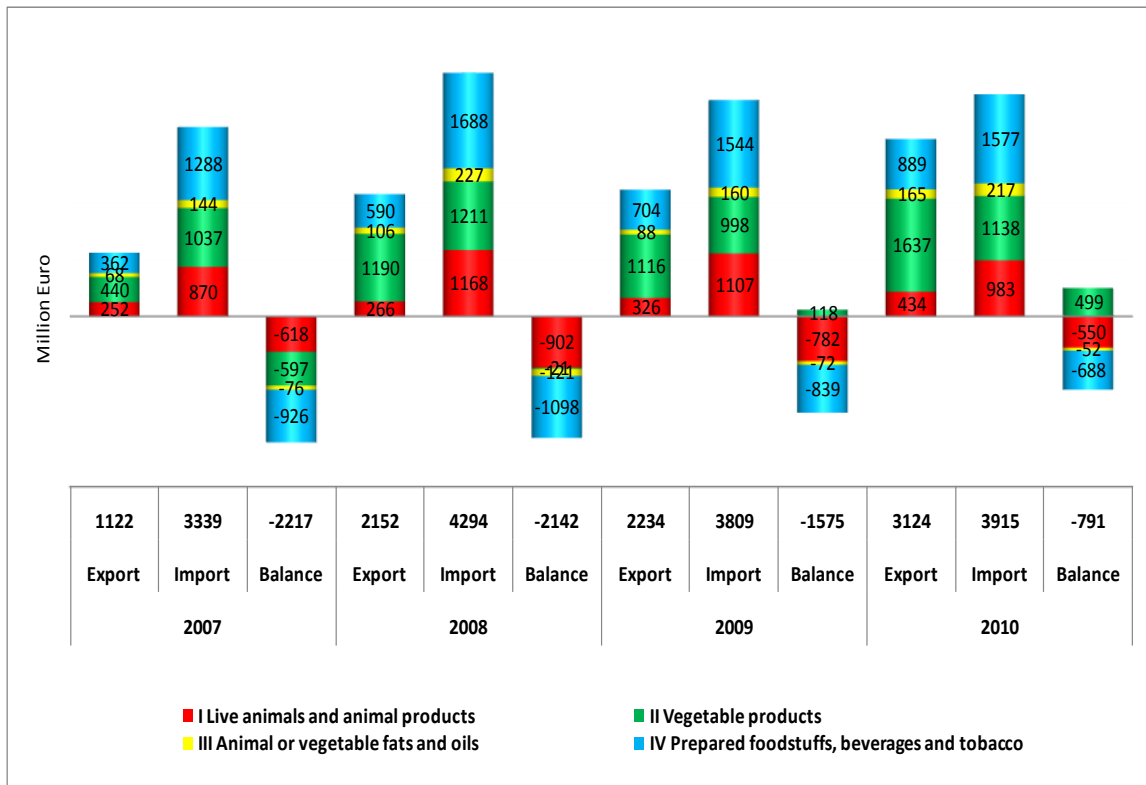
Romania's main agricultural products traded with the EU countries in 2010 covered a 41% share in intermediate and 39% in final exported products, respectively, in imports the final products prevailed, with a 60% share; while to third countries the commodities had the major share, of 56%.



Source: author's processing of EUROSTAT statistics (5)

**Chart 2. Structure of the agri-food trade, by category of product area of destination/origin**

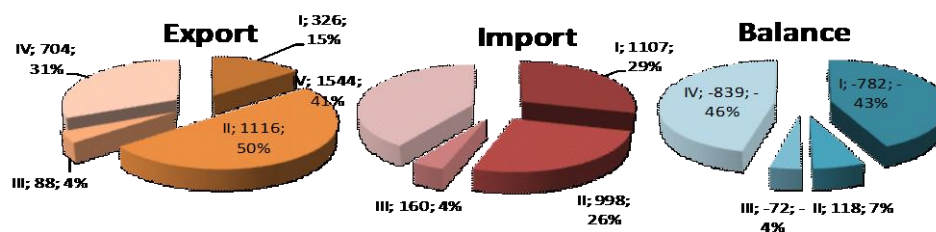
Subsequent to the year 2007, the country's relations within the EU region had an ascendant importance, whereas the imports absorbed by Romania from third countries' had a market share decrease, i.e. from 45% in 2006 to 18% in 2010.



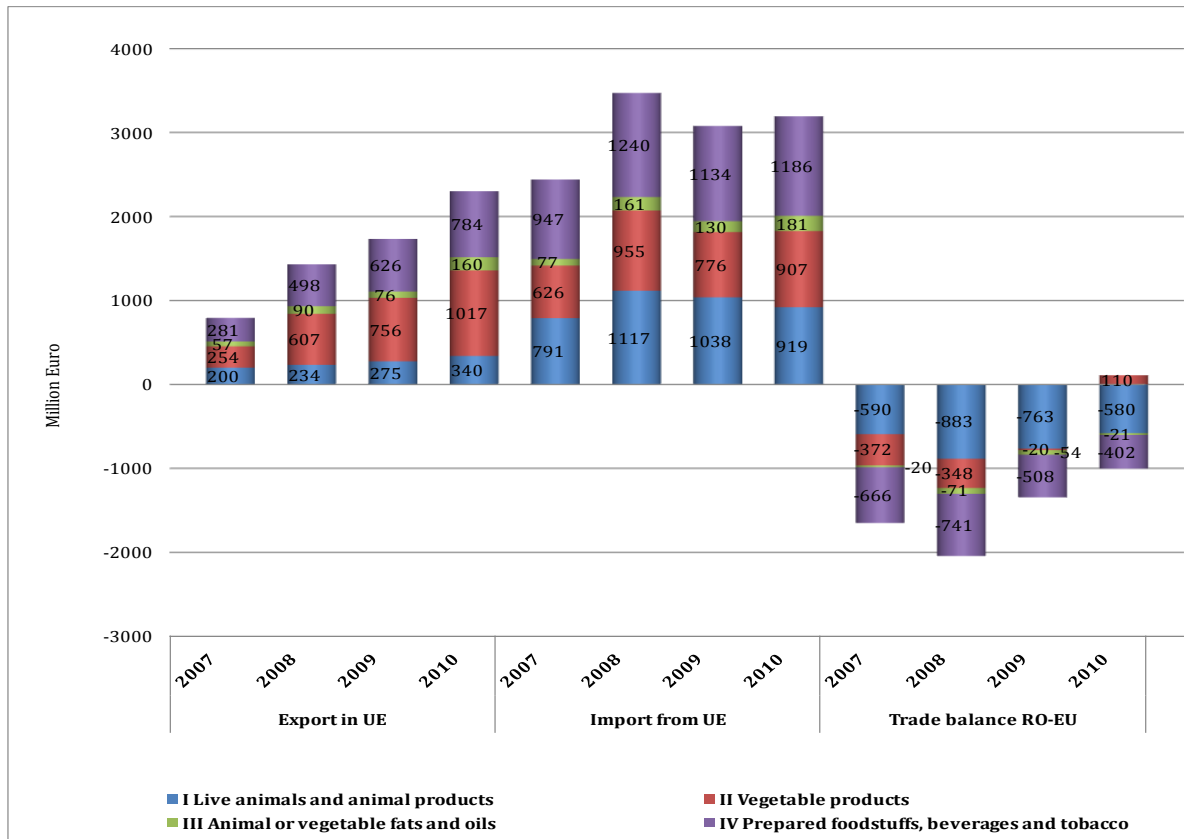
Source: author's processing of EUROSTAT statistics (4)

**Chart 3. Changes in the structure of Romania's agri-food trade - exports, imports and trade balance**

Except for the year 2009, when a net export of vegetable products was registered, the agri-food trade balance was negative for all the remaining chapters of the CN. Vegetable products, corresponding to section II, shared half of exports in worth of 1.1 billion Euros, and with 300 millions Euro they shared over a quarter of imports (26%).



The traded products included in section III - Animal or vegetable fats and oils, also deficient, maintained a 4% share in trade flows and balance.



Source: author's processing of EUROSTAT statistics (4)

#### Chart 4. Evolution and structure of Romania's agri-food trade with EU

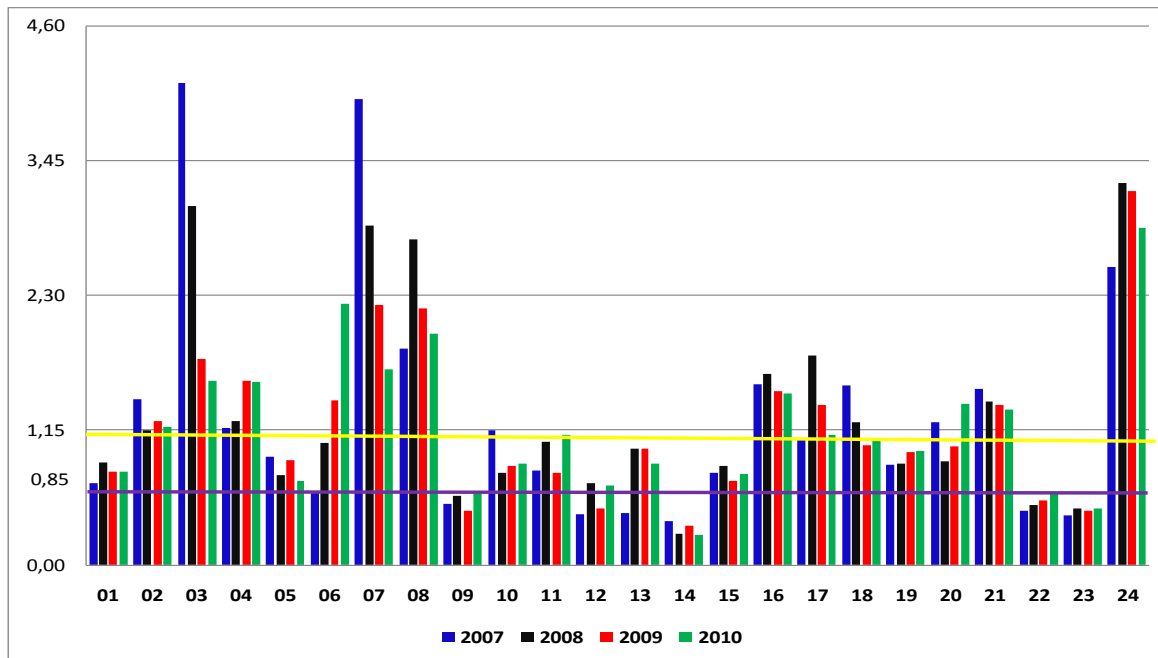
The balance on trade relationship with the EU was fluctuating. The deficit almost halved, from -1.6 billion Euros in 2007 to -0.9 billion Euros in 2010. The categories of products remained insufficient in the most of sections of the CN, except for vegetable products in the year 2010, due to a favourable harvest.

Net exports to the EU member countries have been achieved in 2009 only by products belonging to the following groups: live animals (chapter 01), where exports have maintained an average of 136 millions Euro, but imports gained a rate of growth of 248% in 2009 compared with 2007, from 47 millions Euro to 117 millions Euro; cereals (chapter 10), whose exports totalled 361 millions Euro, while imports valued 228 millions Euro; oil seeds (chapter 12), whose exports increased almost 4 times, registered 317 millions Euro, while imports, of 70% larger, valued 105 millions Euro; tobacco and substitutes (chapter 24) tripled their exports, amounting to 348 millions Euro, while imports totalled 126 millions Euro.

The evaluations revealed an improvement of the terms of trade on in the last period of analysis on the following groups of products: meat, milk and dairy produce, other products of animal origin, live plants and flower products, cereals, other products of

vegetable origin, preparations of cereals, fruits or vegetables and beverages, spirits and vinegar.

The agricultural products and foodstuffs with lower quality products shared 63% in Romania's agri-food exports and had a low average value of exports, were those included in chapters: 01 - live animals; 09 - coffee, tea, mate and spices; 10 - cereals; 11 - products of milling industry; 12 - oleaginous seeds and fruits, medicinal or industrial plants, straw and forage; 14 - other products of vegetable origin; 15 - animal or vegetable fats and oils; 22 - beverages, spirits & vinegar; 23 - residues and waste from food industries.



Source: author's processing of EUROSTAT statistics (4)

**Chart 5. The relative unit value indices of the Romania's agri-food traded products, in the period 2007-2010**

Products vertically integrated, revealing high-quality exports and specialization level, accounted for 32% of Romania's agri-food exports; aggregated by chapters of CN, they are: meat and edible offal (02); fish and crustaceans (03); milk and dairy products, eggs and natural honey (04); live plants and flower products (06); edible vegetables, roots and tubers (07); edible fruits (08); preparations of meat and fish (16); sugar and sugar confectionery (17); miscellaneous edible preparations (21); and tobacco (24).

By contrast, the products with horizontal trade integration had a much lower share in exports, of 5%. Such products were those included in chapters: other products of animal origin (05); gums, resins and other vegetable saps and extracts (13); cocoa and cocoa preparations (18); preparations of cereals, flour, starch; pastry (19); and preparations of vegetables and fruits (20).



## CONCLUSIONS

- ✚ A decrease of domestic performance in the face of growing external competitiveness, with a strong impact both on the food industry that needs to reshape the strategies for going on the market and on the agricultural sector, where changes imposed by the adoption of CAP have increased the pressures on farmers to in the confrontation of the market developments.
- ✚ Trade disadvantage compared to the EU products, dependence on imports of processed products and of animal origin, the low competitiveness of the processing sector being the main disadvantage in obtaining higher revenue from exports.
- ✚ The influences on food markets can be reflected by temporized import flows, narrowed supply ranges, but also by the reduction of external agri-food trade deficit, however through less competitive exports rather than on the basis of imports.
- ✚ Evaluation regarding the quality of international trade is an useful instrument to support the policy decisions concerning the restoration and development of the sector; applied on foodstuffs it might have the purpose to promote the products with export potential and those returning extra benefits from international markets, focusing on products with high value added.

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