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COMPETITIVENESS OF THE ROMANIAN ECONOMY FROM EUROPEAN PERSPECTIVE

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ABSTRACT[34]: The sustainable growth of economic competitiveness as a whole and of industry, in particular, is of paramount importance for Romania. A look at the literature reveals that although there is no consensus in defining and measuring competitiveness, many studies focus on competitiveness i) in a broader sense, envisaging the overall economic development, and ii) in a limited sense, concerning only the foreign trade relationships and the correlation between the domestic currency exchange rate, foreign prices and domestic inflation rates (or costs in sectors that produce tradable commodities). In such line of argument, the paper presents a picture of the Romanian economy competitiveness in the European context, focused on the analysis of real effective exchange rate, the evolution of Romania's foreign trade with the European Union and the comparative advantages/disadvantages on the European markets.

KEYWORDS: competitiveness, real effective exchange rate, deflators, foreign trade, comparative advantage
JEL CLASSIFICATION: F11, F14, F16, F31

INTRODUCTION

The new European architecture, to which Romania is participating, opens up unexpected prospects to social-economic and cultural exchanges, stimulates efforts to modernize and streamline the national structures in a competitive framework,

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[34] The paper presents some preliminary results of research performed for the project: Consolidarea competitivităţii clusterelor inovative şi evaluarea comparativă a competitivităţii sectoarelor industriale – instrumente de politică industrială durabilă, adaptate erei globalizării, Contract No. 06/04.10.2011, Phase I/2011: Analiza comparativă a strategiilor, politicilor şi instrumentelor de dezvoltare industrială, cu accent pe rolul jucat de structurile de tip cluster/pol de competitivitate în România şi în Uniunea Europeană şi identificarea instrumentelor şi măsurilor specifice de sprijinire a parteneriatelor inovative, Contracting Authority: Ministerul Economiei, Comerţului şi Mediului de Afaceri, Contractor: Institutul de Prognoză Economică, November 2011.

according to the international requirements. The single market with 500 million consumers, 220 million workers and 20 million entrepreneurs is the basis of construction of a Europe whose growth is based on more competitive firms acting in an economy that is becoming increasingly global.

Competitiveness and globalization, as basic concepts in economic theory, have an increasingly important place in economic debates and studies. In terms of competitiveness, many papers show that competitiveness creation level is the microeconomic one, because firms are interacting in their efforts to entry, maintain on and develop in the markets.

However, firms operating in an economic environment where the role of national and international economic frameworks in creating comparative and competitive advantages, especially in the context of globalization of economies, cannot be neglected. Globalization may lead to even greater convergence of economic performance of economies and nations, including competitiveness.

Due to globalization, Europe already has acquired a number of advantages, such as lower prices for consumers and businesses, a substantial increase in the volume of international trade, higher levels of productivity and real wages, spread of technological progress to a larger scale and greater variety of products.

To continue to receive benefits of globalization, it must ensure full implementation of the Europe 2020 Strategy proposed by the European Commission, which will enable the Union to emerge stronger from the current economic crisis, to direct the economy towards:

a) smart growth, knowledge- and innovation-based;
b) sustainable economic growth, by promoting a greener and more competitive economy, based on more efficient use of resources and
c) inclusive growth, by promoting high employment economy, able to generate social and territorial cohesion.

For Romania, the sustainable growth of economic competitiveness as a whole and of industry in particular, is of paramount importance. A look at the literature reveals that although there is no consensus in defining and measuring competitiveness, different studies focus on competitiveness in a broad sense covering various aspects of performance and economic efficiency: from the price of products, costs and quality to the capacity of firms to adapt to consumer preferences and new technologies, from macroeconomic and institutional performance to flexibility of market factors, etc.

Academician Emilian Dobrescu (2005) believes that "although not always specified (rather not specified at all), the term (competitiveness) circulates in two somewhat different meanings:

i) a broader sense envisages the overall economic development and is difficult to define, and
ii) a limited sense concerns only foreign trade relationships and refers to the correlation between the domestic currency exchange rate, foreign prices and domestic inflation rates (or costs in sectors that produce tradable

commodities). The correlation between the domestic currency exchange rate, the foreign prices and domestic inflation rates can be expressed through the aggregate indicator of the real effective exchange rate.

As discussed above, the paper presents a picture of the Romanian economy competitiveness in the European context, focused on the analysis of real effective exchange rate, the evolution of Romania's foreign trade with the European Union and the comparative advantages/disadvantages on the European markets.

1. EXCHANGE RATE AS INDICATOR OF ROMANIAN ECONOMY COMPETITIVENESS

To analyze the competitiveness of Romanian economy in relation to major global competitors, the bilateral and multilateral nominal effective exchange rate, the real exchange rate (RER) and the real effective exchange rate (REER) deflated by consumer price index and by industrial products price index (considered a good proxy for tradable goods - see Menzie D. Chinn, 2002) and the unit cost of labor in industry were used as indicators[35].

Eurostat data for Romania were used in order to analyze the effective exchange rate (real and nominal), annual and quarterly data computed for 36 trading partners over the interval 2000-2011.

For the calculation of bilateral nominal effective exchange rate monthly data during 1991-2011 from the NBR bulletins were used.

Nominal exchange rate movements against the U.S. and European currencies during the analyzed interval are shown in Figure 1, a continuous trend of depreciation of currency indicating an increase in competitiveness and a currency appreciation a decreased competitiveness of the Romanian economy.

Bilateral nominal exchange rate developments suggest an almost constant trend of depreciation of domestic currency, with different intensities from one year to another (much more pronounced before 2000), both against the U.S. dollar and against the euro, as a result of both slippages of economic policies ("stop and go" monetary policy, high fiscal and current account deficits) and of different exchange rate regimes.

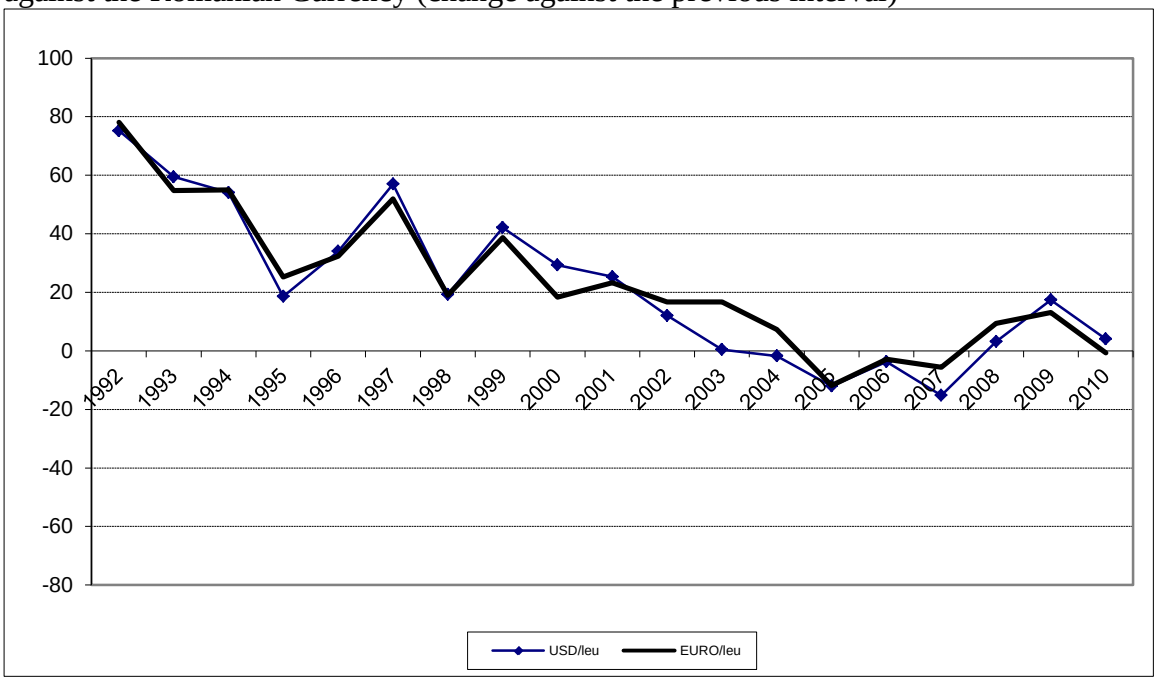
After 2000, an alternation of periods of appreciation/depreciation was visible. The decrease in bilateral nominal exchange rate indicates an increase in competitiveness of the Romanian economy, both before 2000 and afterwards.

The upward trend in the period 2005-2007, when the leu strengthened against the euro and the U.S. dollar, shows that due to the depreciation of both currencies against the leu, the Romanian economy has recorded a loss of export competitiveness and cheaper imports (which for products in U.S. dollars continued also in 2007), as

[35] For methodological presentation and discussions, see E. Pelinescu (ccordinator), *Cursul de schimb şi competitivitatea în perspective aderării la Uniunea Europeană*, Editura Expert, Bucureşti, 2006.

noted in Figure 1, which had a negative impact on the balance of payments, which has deteriorated sharply in this period.

Figure 1. Nominal Appreciation (+)/Depreciation(-) of US Dollar and EU Currency against the Romanian Currency (change against the previous interval)



Source: Authors' computations on the basis of data from the NBR Monthly Bulletins over the interval 1991-2010.
Note: For the interval 1991-1999 the exchange rate was Ecu /leu.

The 2008 crisis reversed the trend of American and European currencies movement against the leu, which led to a resumption of upward trend of the Romanian economy competitiveness.

Nominal effective exchange rate movements (NEER, calculated based on the 36 trading partners) showed similar trends; the data reveal that whether over the years 2000-2005 the Romanian economy recorded growing competitiveness, the trend reversed after 2005, following deterioration in competitiveness against 36 major trading partners until 2009, when the tendency of increasing competitiveness was resumed.

In literature (Rajan, 2004), it is considered that the nominal exchange rate depreciation is actually a consequence of large-scale use of imports in manufacturing and that repeated use of nominal depreciation policy as a tool to raise national competitiveness leads to loss of efficiency because costs and prices will increase as a result of anticipation or simultaneously with currency depreciation.

The statement is confirmed also in the case of Romania, whose manufacturing is based largely on imports of raw materials and equipment (including for outsourcing

processing) and has faced both domestic currency depreciation and high inflation rates that have led to loss of long-term effectiveness of this industry.

On the other hand, by increasing the nominal appreciation of domestic currency against other world currencies as a result of capital inflows amid high rates of recovery of capital (high interest rates) and market information asymmetry, in Romania both exchange rate stability and price competitiveness were affected as well.

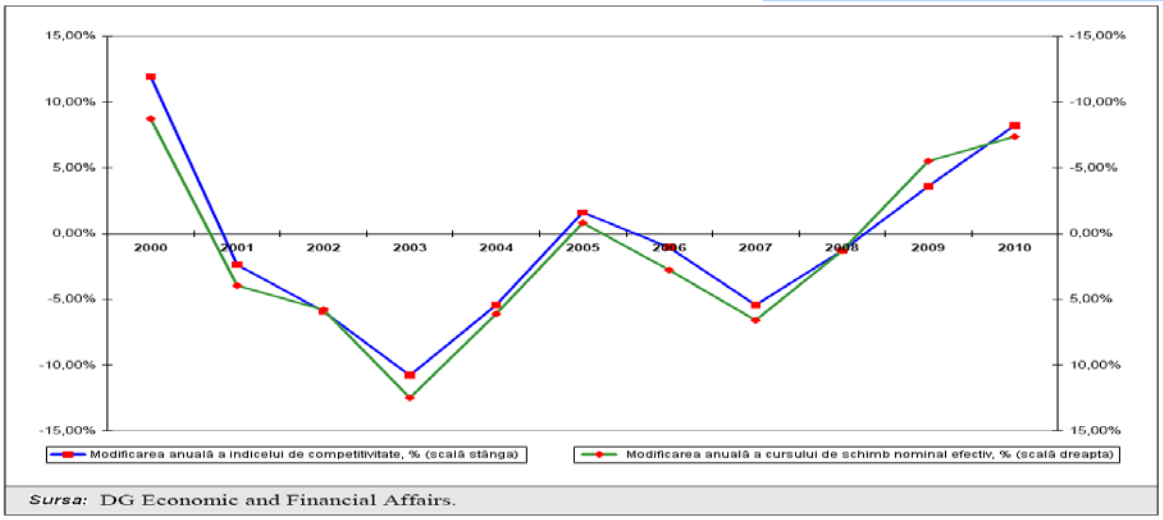
When comparing the evolution of the NEER in Romania with the one registered the EU27 countries one may notice that the nominal effective exchange rate trajectory closely follows that of competitiveness cost index, which highlights the potential of the NEER as an indicator of competitiveness, as shown in Figure 2.

The nominal effective exchange rate deflated using the consumer price index – CPI deflator, the GDP deflator - DGDP and industrial products price index - PPI indicates a trend of loss of competitiveness in the period 1994-2005.

The explanation of these developments is the influence exerted by other important factors of competitiveness, namely labor costs and inflation, expressed by the GDP deflator or the commodity price index (CPI).

Expanding the analysis after 2000 based on annual REER data from Eurostat and calculated for the 36[36] main trading partners of Romania and for the EU 27, it was found that REER trajectories were almost similar but slightly shifted due to different evolution of deflator used (unit labor cost or CPI), as noted in Figure 3. Increasing the number of trading partners from 19 to 36 did not significantly alter the REER trends.

Figure 2. Competitiveness Index Based on Unit Labor Cost

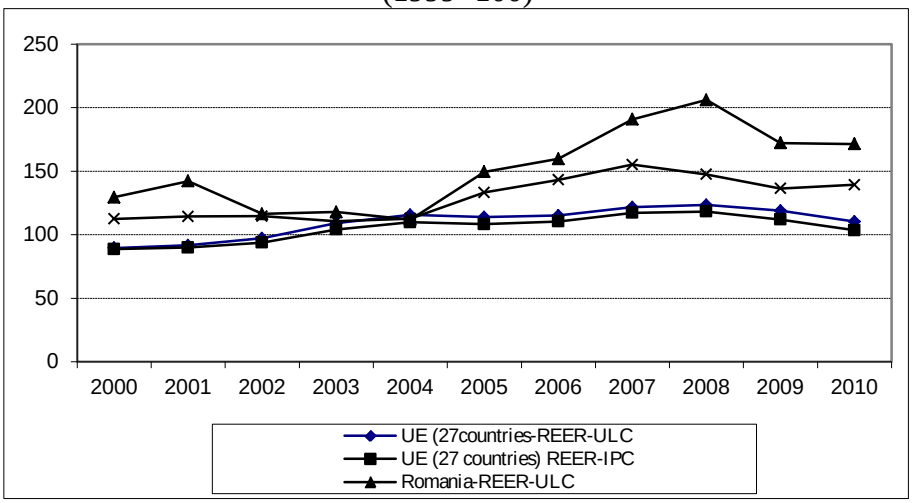


Source: European Commission Enterprise and Industry, Commission Staff Working

[36] The 36 trading partners considered were: the EU27 countries, Australia, Canada, the USA, Japan, Norway, New Zealand, Mexico, Switzerland and Turkey, the weighting was doubled for exports to reveal not only the domestic, but the foreign competitiveness as well.

Document, Member States Competitiveness Performance and Policies 2011, SEC(2011), 1187, p. 13.

Figure 3. Real Effective Exchange Rate as against 36 Main Trading Partners of Romania
(1999=100)



Source: Eurostat Data.

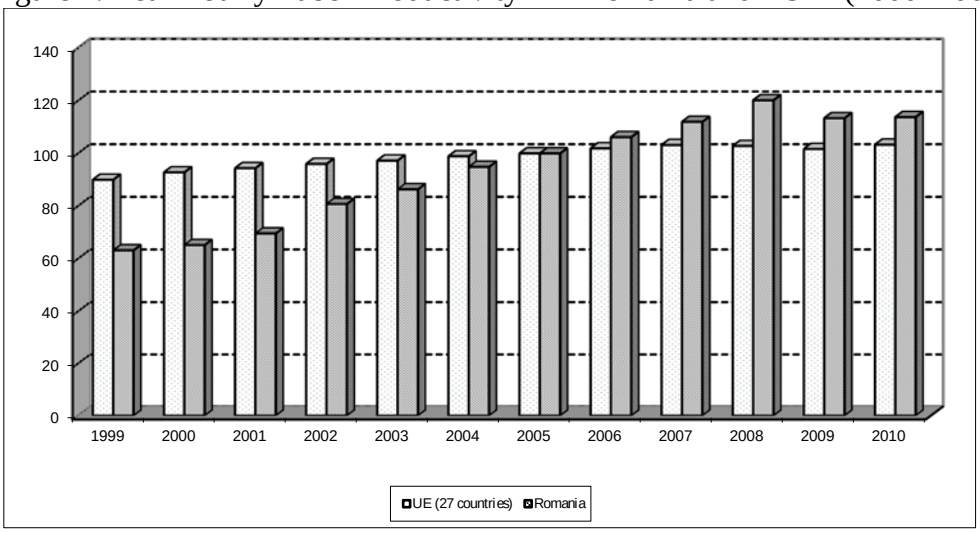
Following the trend registered in the EU27 countries, Romania has experienced a strong appreciation of real effective exchange rate in the last decade (80%, as compared to only 21% in the EU27), indicating a loss of competitiveness at both costs (REER-ULC) and prices (REER-CPI). In Romania, the 326% increase in the labor unit costs in 2010 as compared to 2000 and high inflation have played an important role in this evolution. A document published by the European Commission shows that in 2000-2007 the cost competitiveness in the 27 EU countries has been eroded by more than 25% due to the movement of the euro against the currencies of the 36 trading partners considered, which was reflected also in the Romanian economy.

It is worth mentioning that although the hourly productivity of Romanian workers increased gradually in recent years, it is still 58% below the level of the EU 27 countries, which is reflected by the movement of the real effective exchange rate of Romania as compared to EU27 (Figure 4).

Appreciation of national currency against the currencies of trading partners is both the result of the Balassa-Samuelson effect revealed for almost all the transition countries that joined the EU and, especially of the capital inflows due to either the acceleration of the privatization process or to the income and net transfers. Net capital investment in Romania increased from Euro 1.3 billion in 2000 to Euro 5.2 billion in 2005. Net income and transfers increased from Euro 633 million in late 2000 to Euro

1349 million in late 2005, which led to the nominal appreciation of domestic currency against the euro and U.S. dollar, and even in real terms since 2005.

Figure 4. Real Hourly Labor Productivity[37] in Romania and EU27 (2000=100)



Source: Eurostat Data.

After a peak in 2005, the capital inflows have followed a downward trend to 3444 million Euros in 2010 and to 1.169 billion Euros in the first nine months of 2011. The net income and transfers fell to 339 million Euros in 2010 from 2250 million Euros in 2009 and to 417 million Euros in first nine months of 2011, on the background of deteriorating balance of net income (which from positive turned negative), so that these flows have not supported that the Romanian currency any longer, and it depreciated against the currencies of the trading partners.

One should notice the much larger gap between REER deflated by ULC and REER deflated by the CPI in the case of Romania, which highlights the major impact of income policy applied in 2007-2008 on this indicator, the trend being to reduce this gap after 2009 due to changes in the wage policy, especially in the public sector. In this context, it is necessary to emphasize the importance of labor costs to ensure competitiveness in the short, medium and long term in terms of competitive advantage and not of comparative advantage in the Ricardian sense.

According to Porter (1990), the cost of labor is an important factor of demand conditions that shapes the competitive advantage of nations. Other authors (Dunning, 1993, Caves, 1996, Buckley and Casson, 1998) highlight the importance of national labor cost and labor market flexibility in the location or relocation decisions of multinational companies, with impact on competitiveness. To ensure long-term competitiveness, the wage policy should correlate with the evolution of labor

[37] The real hourly labor productivity is computed as real GDP (deflated by the GDP deflator, with 2000=100 as fixed base) per unit of used labor, determied as the total number of hours worked.

productivity in respect of the Golden Rule: the productivity growth should surpass that of wages.

Another aspect worthy to note is that the labor cost gap caused a massive migration of labor from Romania to the EU countries, where the incomes are greater, allowing Romanian immigrants even to send billions of euro back home, which has contributed and contributes to the balance of payments equilibrium.

Moreover, these capital inflows associated with the direct capital investments help *reduce the pressure on the exchange rate*. This impact is easily revealed in the case of labor incomes, if we follow the exchange rate fluctuations during the periods with massive inflows of money from the Romanians working abroad, when they return to spend vacations or holidays.

The REER evolution shows that the resources of long-term growth of competitiveness should be sought where it does appear, namely in the manufacturing companies and not the in the macroeconomic policies of real exchange rate depreciation. FDIs orientation towards business restructuring to increase productivity, improve the production structure by increasing the share of high-value added products will ensure long-term competitiveness of the Romanian industry in the European market. To reverse the competitiveness trend of Romania and EU27 countries the rehabilitation of research-development capacity and implementation of new products in the manufacturing industry are necessary.

2. DYNAMICS OF ROMANIAN EXPORTS IN THE EUROPEAN UNION

During 2000-2010, the total exports of Romania in the European Union[38] registered a continuous growth, with the exception of 2009 (when the effects of the economic crisis started in 2008 were felt the strongest in the foreign trade of Romania to the EU, due to the high dependence on European trade partners). The trend of increasing Romanian exports to EU has accentuated after 2003, the total exports of Romania to the EU markets was 2.3 times higher in 2010 than in 2000. The largest increases have been recorded by the product groups 1 - Beverages and tobacco (after 2006), 4 - Animal and vegetable oils, fats and waxes (also after 2006), 7 - Machinery and equipment, including for transport (after 2003) and 5 - Chemicals and related (after 2005).

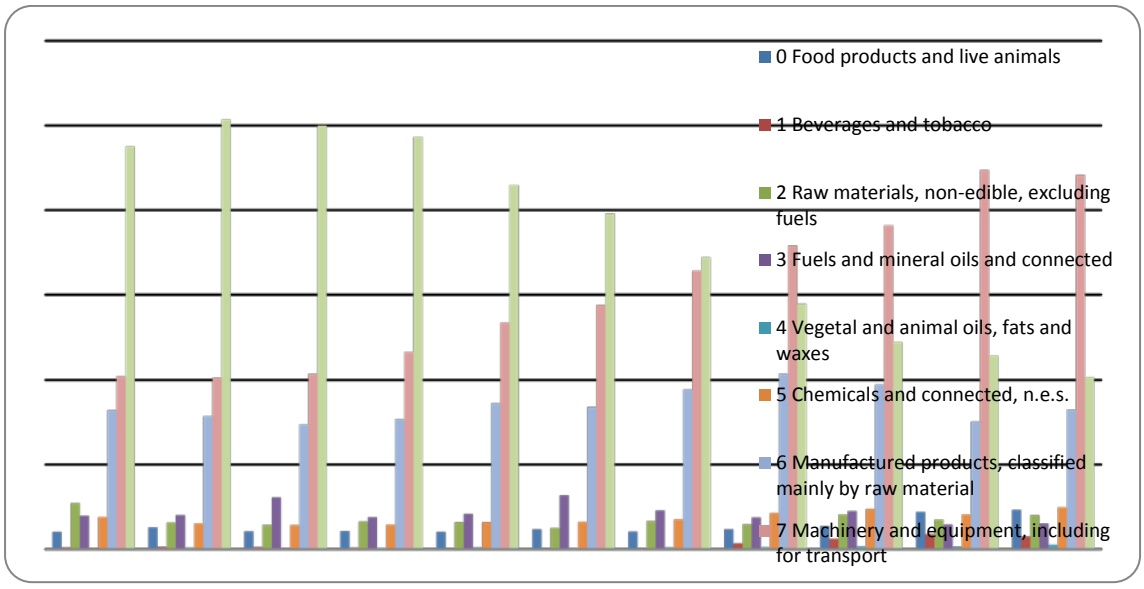
Also, the subgroups of products increases that far exceed the average level of the groups were recorded for subgroups[39]: 09 – Miscellaneous food products, 04 - Cereals and cereal products, 12 - Tobacco and tobacco products, 22 – Oilseeds and fruits, 26 - Textile fibers and wastes, 42 – Vegetable oils and fats, 54 - Medicinal and pharmaceutical products, 59 – Chemicals and chemical products, 62 – Rubber

[38] The intra-EU27 exports and imports of the EU member states were considered, by SITC product groups and subgroups.
[39] Detailed results by subgroups of products were not included due to space restrictions; they may be provided upon request.

products, 78 – Road transport vehicles and 87 - Professional, scientific and measuring and control instruments and apparatus. The only subgroup of products with decreasing (by approx. 10%) exports from 2010 to 2000 was 84 - Clothing and clothing accessories.

Such developments have led to important changes in the structure of exports of Romania in the EU (Figure 5); we can say that 2003 was a turning point in the evolution of Romanian exports on the intra/EU markets - from this year there is an obvious increasing trend of the share of group 7 - Machinery and equipment, including for transport (with a small rebound in 2010) and another of obvious decrease in the share of group 8 - Miscellaneous manufactured articles. Also, during the post-accession period there were significant increases in the shares of agricultural and food products. The general trends are partly found in the product subgroups dynamics.

Figure 5. Romanian Exports in the EU – Share of Main Groups of Products in Total, %



Thus, the share of subgroup 84 - Clothing and clothing accessories decreased from 31.1% of total exports in 2001 to just 8.1% in 2010, of the subgroup of 85 - Footwear from 11.2% in 2001 to 4% in 2010, while the share of subgroup 78 - Vehicles for road transport has increased from only 1.6% of total exports in 2000 to 13.5% in 2010, and of the subgroup 77 – Electric machinery and equipment from 5.1% in 2000 to 13.9% in 2008 (maximum) and 13.5% in 2010. Significant increases were also recorded by groups 62 - Rubber products (from 0.6% in 2000 to 3.7% in 2010), 74 - General industrial machinery and equipment (from 1.7% in 2000 to 5.2% in 2008 and almost 5% in 2010), 76 - Telecommunication equipment and appliances (from 1.1% in 2007 - after a marked decrease since 2000 – to almost 7% in 2010), 54 - Medicinal and pharmaceutical products (from 0.1% in 2003-2005 to 1.6% in 2010),

22 - Oilseeds (from 0.2% in 2002 to 1.6% in 2010), 12 - Tobacco and tobacco products (from less than 0.1% in 2004-2006 to 1.6% in 2009 and 1.3% in 2010) and 04 - Cereals and cereal products (from below 0.2% in 2000 to approx. 1.8% in 2009 and 2010).

At the same time, significant reductions in shares in total exports recorded subgroups 24 - Wood and cork (from 2.2% in 2000 to approx. 0.5% in 2010), 33 - Crude oil, petroleum products and related materials (from 5.3% in 2005 to 2.5% in 2010), 66 - Non-metallic mineral products (from 1.5% in 2001 to below 0.5% in 2010), 67 - Iron and steel (from 5.3% in 2008 - after a period of growth – to just 2.3% in 2009 and 3.1% in 2010), 68 - Non-ferrous metals (from 4.3% in 2000 to 1.5% in 2009 and 1.8% in 2010) and 82 - Furniture and supplies for furniture (from 5.1% in 2004 to 3.8% in 2010).

3. DYNAMICS OF ROMANIAN IMPORTS FROM THE EUROPEAN UNION

During 2000-2010, the total imports of Romania from the European Union showed annual increases greater than the exports by 2008, followed by a significant decline in 2009 (a decrease by 28.6%), as a result of crisis-induced adjustments in the Romanian economy, by reducing both domestic and foreign demand. Throughout the period 2000-2010, import growth was even more significant than that of exports by 2008, both overall (by almost 3.3 times) and for the main product groups.

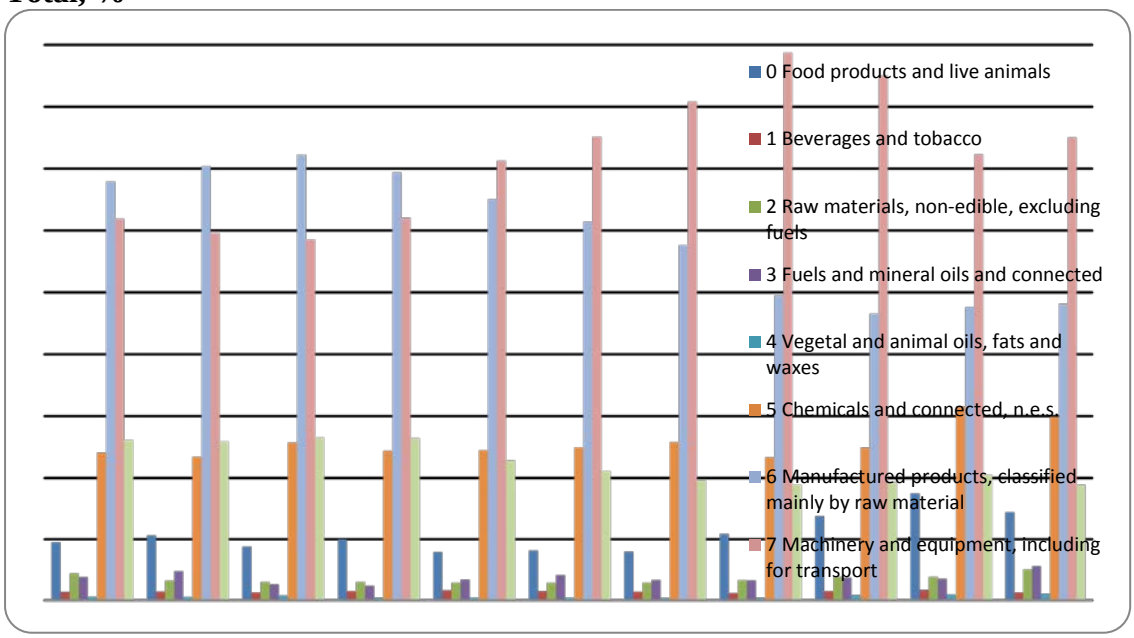
The largest increases were recorded by groups 0 - Food and live animals, 4 - Vegetable and animal oils, fats and waxes and 7 - Machinery and equipment, including for transport, a similar bias in import growth at both ends of the spectrum of technological development being noticeable. By subgroups of products, imports increases much higher than the group average were recorded for subgroups 02 - Dairy products and eggs, 11 – Beverages, 22 - Oilseeds, 25 - Pulp and waste paper, 29 - Raw vegetable and animal materials, 42 - Fixed animal oils and fats, 56 - Fertilizers, 62 – Rubber products, 78 - Vehicles for road transport, 79 - Other transport equipment and 83 - Travel goods, while most notable tendencies of reduced imports were recorded for groups 21 - Raw hides and skins, 28 - Metal ores and scrap metal and 65 - Yarns, fabrics and textile products.

Similar to exports, in the imports structure by main groups of products important changes have occurred, identifying in this case a possible inflection point in 2002 (Figure 6). The most important changes relate to the sharp decrease in imports of Group 6 - Manufactured products, mainly classified by raw material (except in 2008 and 2009) and the sharp increase in the imports of group 7 - Machinery and equipment, including for transport (but oscillating after 2007). Another significant upward trend in imports is identified with Group 5 - Chemicals and related, while a relatively significant downward trend for the group 8 - Manufactured products.

By product subgroups, the most important increases and decreases in the Romanian imports from the EU in 2000-2010 were lower than in the case of exports, indicating the presence of more stable structures, the most worthy to note being the sharp decline in the share of imports of subgroup 65 - Yarns, fabrics and textile

products (from 17.8% in 2000 to 5.1% in 2008 and 5.2% in 2010) and the boom in imports share of group 78 - Road transport vehicles (from less than 4% of total imports in 2000 to almost 15% in 2007).

Figure 6. Romanian Imports from the EU – Share of Main Product Groups in Total, %



4. COMPARATIVE AND COMPETITIVE ADVANTAGES/DISADVANTAGES IN THE ROMANIAN FOREIGN TRADE WITH THE EUROPEAN UNION

Identification of comparative and competitive advantages/disadvantages (in the sense of economic theory) in the Romanian trade in goods with the EU is important in several respects:

- it is a measure of assessing the external competitiveness of the Romanian economy in the specific context of the European single market and EU Member States' economies,
- provides information on specialization of Romanian sectors/industries to adapt their production to the requirements of the European single market, characterized by a high degree of competition and sophistication of consumer demand,
- indicates possible problems of adaptation/adaptability of sectoral structures of the Romanian economy to changes in the general economic environmental conditions and to specific demand shifts,
- provides a picture of the integration of Romanian companies (native or not) in the European production structures and value chains and of the

degree of integration of the Romanian economy as a whole with other economies in the European Union.

Data used to assess the revealed comparative/competitive advantages/ disadvantages in Romania's trade with the EU refers to the Romanian exports and imports to/from intra-EU market[40] and use the SITC classification with average degree of disaggregation (level 2 digits). Both indices of export comparative advantage and overall comparative advantage indices were determined (multiplicative index of comparative advantage, comparative advantage additive index, Balassa general index and Neven index[41], as well as the ratio of exports to imports) for the product groups with the largest shares in the Romanian exports/imports to/from the EU in 2000-2010 and higher degree of industrial processing (5 - Chemicals and related, 6 - Manufactured products, mainly classified by raw materials, 7 - Machinery and equipment, including for transport, 8 - Manufactured products)[42]. The main issues highlighted were:

- In terms of chemical and petrochemical industry and related product groups, with very few (but important) exceptions, the comparative and competitive disadvantages prevailed, and their tendency was to maintain. Thus, for group 5 - Chemicals and related, significant comparative and competitive advantage, but accompanied by a deterioration of the relationship between intra-Community exports and imports of Romania (the trade balance, in fact) were noted between 2000-2010 only in the case of subgroup 56 – Fertilizers, and very weak comparative and competitive advantages in certain years for subgroups 52 - Organic chemicals and 51 - Inorganic chemicals. With the exception of chemical fertilizers and organic chemicals, the shares of chemical product groups in the Romanian exports were very small, however. Besides, chemicals represent a category of goods for which the trade balance deficit has been growing, a situation worsened in 2008 and 2009. Also, there was a significant export comparative advantage and competitive advantage to the end of the period in the case of subgroup 62 – Rubber products. Increases in the share of Romanian exports in the intra-EU exports were recorded also for subgroups 57 - Plastics in primary forms (excluding the years 2009 and 2010) and 58 - Plastics in non-primary forms, but comparative and competitive disadvantages Romania of these products on the intra-EU market are still significant. It is also worth noticing a preserving comparative and competitive disadvantage of subgroup 64 - Paper,

[40] Data from Eurostat.
[41] For details of computing methodology, see M.N. Chilian, *Competitivitatea economiei româneşti şi integrarea în Uniunea Europeană*, Editura Universitară, Bucureşti, 2011.
[42] Detailed resukts are available upon request.

cardboard and goods made from pulp, paper and cardboard, but export volumes remain modest.

- In the case of product groups 'traditionally' exported by Romania to the European markets, based on natural resources and low labor cost, important comparative and competitive advantages were still present, but their tendency was of net diminution, signaling a reduction in specialization in such products. In the case of group 8 - Manufactured products, some of the largest export comparative advantages and competitive advantages were recorded all over the analyzed period, but with significant downward trends in recent years for subgroups dominated by outward processing: 84 - Clothing and clothing accessories, knitted or crocheted, 85 - Footwear and 83 – Travel goods. Trade balance was in surplus throughout the period analyzed, although with downward trend amid the trend of reduction in exports and the cap relative to the volume of imports. Subgroup 65 - Yarns, fabrics and textile products, which include mostly inputs for the above-mentioned groups, showed significant comparative disadvantage, although with downward trend, due to maintaining a trade balance in deficit. Finally, in the case of Group 82 - Furniture and supplies for furniture - a more significant export comparative advantage and a constant competitive advantage were recorded (in decline, however, in recent years), accompanied by a trade balance surplus.
- In terms of the product groups with higher energy intensity, the comparative advantages recorded by the metallurgical products (except for subgroup 69 - Metal products, which consistently showed comparative disadvantages) were "transformed" in 2009 and 2010 into significant comparative disadvantages, due to high decline in the demand for Romanian products on the European markets. In the case of subgroup 66 - Non-metallic mineral products, an increase in the comparative and competitive disadvantages was registered, along with an increasing trade deficit.
- Finally, the most important changes are reported for groups of products with higher technological level: significant increase in the share of Romanian exports in the European ones, significant diminution of comparative and competitive disadvantages and gaining of comparative and even competitive advantages, the trade and production specialization model evolving clearly in favor of such products. Thus, group 7 - Machinery and equipment, including for transport, recorded the most significant changes in the structure of international trade flows of Romania with the EU, but also important developments in terms of comparative and competitive advantages (translation from the comparative and competitive disadvantages to advantages in the years 2009 and 2010, due to significant reduction in the trade deficit). Subgroups 76 - Telecommunications equipment and 77 - Electrical machinery and apparatus passed from

comparative and competitive disadvantages to significant export comparative advantage and increasing competitive advantage to the end of the period, while the trade balance shifted from deficit to surplus, but situation is reversed for subgroup 71 - Machinery and equipment for power generation, where the comparative advantages of the early 2000s have been eroded and turned into disadvantages and the trade balance deteriorated. Regarding transport equipment subgroups, the most remarkable development was that of subgroup 78 - Vehicles for road transport - which in 2009 and 2010 shifted from comparative disadvantage to advantage and to a trade balance surplus (however, also due to drastic reduction in imports of motor vehicles form the intra-EU market induced by the economic crisis). Finally, subgroups 87 - Professional, scientific and measuring and control instruments and apparatus and 88 - Photographic apparatus and equipment, optical products, continue to have comparative disadvantages, albeit weakening, accompanied by trade balance deficits.

CONCLUSIONS

The external competitiveness of the Romanian economy has experienced alternative periods of gain and loss. The gains obtained by the nominal depreciation of domestic currency to support competitiveness were only temporary, on long term being required measures to enhance productivity, to better correlate wage earnings with productivity throughout the economy and to change production in according with the domestic and external demand developments.

The trend of appreciation of real effective exchange rate, characteristic not only to Romania but to all the countries that have gone through the transition period, can be considered a normal one, which finally provides the intensification of economic agents' efforts to increase productivity in order to survive and grow in an open market economy, subject to competitive pressures. A number of specific factors can explain this trend, of which we may retain as having a broader spectrum the Balassa Samuelson effect, econometrically demonstrated in a number of countries in transition, the capital inflows generated by privatization and restructuring, and the inflows of incomes of domestic citizens working abroad (more visible in Romania and Bulgaria).

Amplitude of the real effective exchange rate movements is closely related to the exchange rate regime in the country considered; the fluctuations are much lower for fixed exchange rates in a tough monetary policy regime (currency board). Often, these movements are related to the fact that the nominal exchange rate depreciation was used as a means of improving short-term current account deficits (and not only for Romania). As an EU member, Romania has to face new challenges related to competitiveness and exchange rate policies, involving macroeconomic policies, mainly wage policy, by restoring the wage-productivity correlations destroyed during the period of transition.

The economic crisis of 2008 has significantly affected the Romanian exports on the intra-EU market, especially in 2009, when the strongest effects of crisis were felt (embodied primarily in import demand and order reduction) among the trade partners of Romania in the EU. Despite the overall decline, there were groups/subgroups of products that have achieved good export performance, however, placed rather at the ends of technological development spectrum: agricultural and food products and machinery and equipment.

With very small (but important) exceptions, all groups/subgroups of products registered significant increases in the level of exports during 2000-2010, especially since 2003, which, in retrospect, may be seen as an inflection point in the evolution of Romanian total exports to the EU. The same year may be considered as a point of inflection for the structural evolution of Romanian exports to the intra-Community market, the main change being the important advance registered by products with an advanced level of technological development, such as machinery and equipment, and the decline in exports of labor intensive, outward processing products. Also, in the post-accession period, the advance of Romanian agricultural and food exports to the intra-EU market was noticeable. Nevertheless, such a point (or time) of inflection it is possible to appear also in the period after 2009, which may induce further changes in the evolution and structure of Romania's EU exports by adapting them to the general economic developments and to the European trading partners demand, although lower in magnitude as compared to the pre-accession period, but with sudden fluctuations from one year to another.

Romania's EU imports increased more than the exports in the period 2000-2010, but also two inflection points can be noticed in their evolution, the first in 2002, when the accelerated imports growth began (one year later reflected in accelerated exports growth) and another in 2009, when there was a sharp decline induced by the crisis. The most important adjustments induced by the 2008 crisis to imports were registered both in subgroups of primary products for consumption (due to reduced household income and, hence, domestic demand) and products for investment, whether in fixed capital formation, technological upgrading and related real estate. The largest increases in imports during the period analyzed occurred in the case of subgroups of raw materials or products with low degree of processing, as well as in that of subgroups of products in connection with the automobile industry. At the same time, the most important trends to reduce Romania's EU imports were recorded for subgroups of products that are inputs to production subject to outsourcing arrangements.

Similar to exports, significant changes in the structure of imports were registered, in favor of groups and subgroups of products with a higher technological level and at the expense of products with high intermediate or energy intensive, but the magnitude and number of changes are smaller than for exports, suggesting a relatively stable structure. Also, the presence of inflection points for imports in the years 2002 and 2008-2009 it is worth mentioning, suggesting the start of a new period of restructuring, this time caused by the economic crisis (still ongoing).

Analysis of Romania's foreign trade with the EU highlighted, especially in the pre-accession period, a "specialization" especially in providing products and services with low added value and high consumption of labor and energy, but higher-tech products recorded significant increase in share in recent years. In terms of capital-intensive products, most Romanian products with significant shares on the EU market and comparative advantage also recorded significant shares in the country's total exports. However, some products or groups of such products which had important shares in Romanian exports did not also register comparative advantages, or only some very small ones. Paradoxically or not, the economic crisis led to an improvement in recent years in the relative competitive position of Romania, but especially on account of adjustments induced by reduction in imports caused by the economic crisis.

Analysis of Romania's international specialization pattern in terms of comparative advantage shows the location of our country's economy still in the phase of advantages based on factors of production, the current international specialization of Romania being still confined mainly in the sectors of labor-intensive goods and standardized industrial products in the maturity stage of their life cycle. From this point of view, Romania is competitive in industries that require low processing technology, cheap and widely accessible. Also, it should be noted that the EU is the main commercial partner of Romania, representing a market for much of Romania's exports of industrial products, and the negative side of this situation was fully felt in 2009, when the European partners import demand reduction led to an important rebound of Romanian exports to the intra-EU market. The feature of the Romanian exports to the EU is their high concentration in a not very large number of groups and subgroups of products, such as textiles and clothing, footwear, furniture, articles of iron and steel and, in recent years, machinery and production equipment, household equipment, telecommunications equipment and vehicles. As regards imports, they consist mainly of machinery and equipment, chemicals, transport means and materials, imports of raw material processed in the system for future export contracts, raw products, agricultural products and foodstuffs.

Finally, the structural changes in the evolution of Romanian exports and imports to/from the European markets, in the percentages of groups/subgroups of products and in the dynamics of comparative advantages/disadvantages received new impetus as a result of the economic crisis triggered in 2008, whose effects are far to be mitigated, especially when the prospect of a new recession is looming again over Europe.

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