

THE DYNAMIC ANALYSIS OF ROMANIA'S INTERNATIONAL ECONOMIC RELATIONS WITH THE EUROPEAN UNION

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This paper carries out a description of Romania's external trade evolution with the EU Member States using an indicators' analysis of different aspects in the international trade. In this way, the dynamic analysis of the factors influencing Romania's recent international trade relations aims to complete the picture of the national economy's situation, but also to highlight its possible trajectory. The analysis conducted through the external trade exchange indices reveals some positive progress for the Romanian trade in the process of European integration.

Keywords: *international economic relations, external trade, indicators for external trade exchange ratio.*

JEL: *C46, F40, P45.*

Generally, the enlargement of the European Union determined a trade increase in the enlarged Union without affecting trade flows with extra-comunitary countries. European agreements signed by each candidate country have allowed free trade between the European Union and its new members on the basis of reciprocity, but have been put into operation in an asymmetrical manner, with a faster liberalization on the side of the European Union and holding some restrictions in a few sectors. Thus, these countries have rapidly become important trade partners for the European countries.

Romania's external trade has known for a long period of time a cyclide evolution with a general tendency of growth. In present, the external trade is in an ascending phase. A general characteristic for the external trade's activity, especially after the year 2000, is its faster growth compared to the GDP's and other macroeconomic indicators', reflecting in a more pronounced way Romania's gradual opening to the international economic system.

Beginning with the year 2003, the external trade evolution is characterized by a serious deterioration of the trade deficit. In the last four years, the rapid growth of the imports generated a permanent trade deficit, slowly oscillating from a year to another, but with an acceleration tendency in its chronic state. The most significant trade deficit was recorded in the period 2007-2008.

In the same order of ideas, it is obvious that Romania's commercial relations with the EU became the main component and the general trade's „engine” for Romania. As a consequence, the evolution tendency for the total export and import flows is similar, in dynamic and fluctuation, with the EU trade's evolution. In the context of the EU's integration process and the commercial

stimulatives' policies, Romanian foreign trade with the EU is in an ascending phase, necessary for a country which has as a target the full integration in the EU.

According to the most recent studies, in most countries in view, imports and trade deficits with European partners tended to increase. Having considered these evolutions, it is most likely that Romania will register a high increase of the imports from the European Union, also due to the maintaining of its high economic growth based on internal consumption. Thus, European Union's contribution to Romania's trade deficit might increase in the following years.

Exports' evolution in the near future will be mostly influenced by 3 factors: the evolution of the leu's rate of exchange, the changes in the dynamics of the production for exports and exports structural changes, and the changes in the trade policy due to the adhesion to the European Union.

The fact that exports are generating revenues, while imports are causing payments, has gradually led to the design and implementation of a macroeconomic system of indicators of a dynamic comparative analysis for the two international trade flows (*Figure 1.*), which is frequently used in countries' reports.

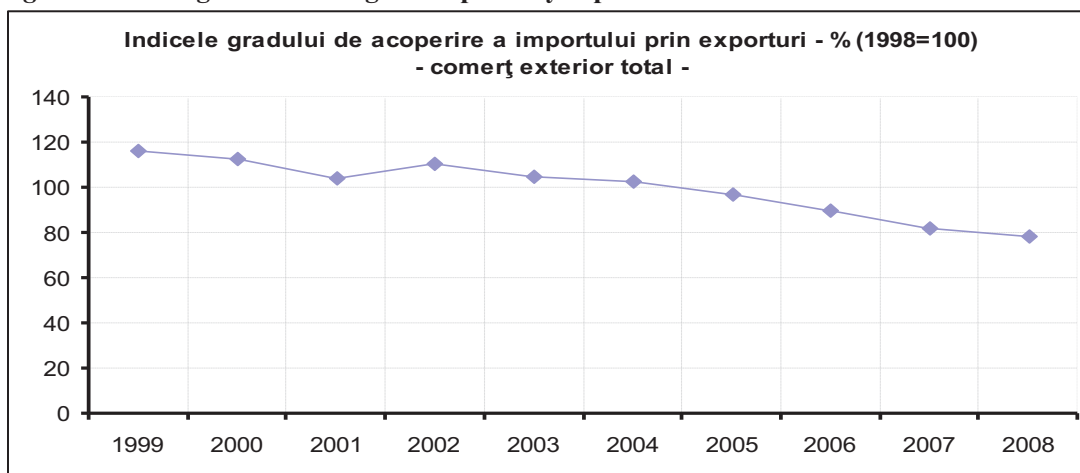
This system of indicators is based on several established ways of evaluating the external trade effectiveness, methods used by Eurostat in the European Union and The National Bank of Romania.

A first indicator of this system is *the degree of coverage of imports by exports* which characterizes the evolution of the imports of goods' coverage by exports of goods comparative

with the reference period:
$$IGA = \frac{I_{(X)}^v}{I_{(M)}^v} \cdot 100$$

In Romania, the decreasing trend noted in the period 1998-2008 (*Figure 1.*), leads us to the pertinent conclusion of a serious deterioration of the commercial balance over the 10 years period.

Figure 1. The degree of coverage of imports by exports in Romania's external trade



Primarily data source: *The National Statistical Institute.*

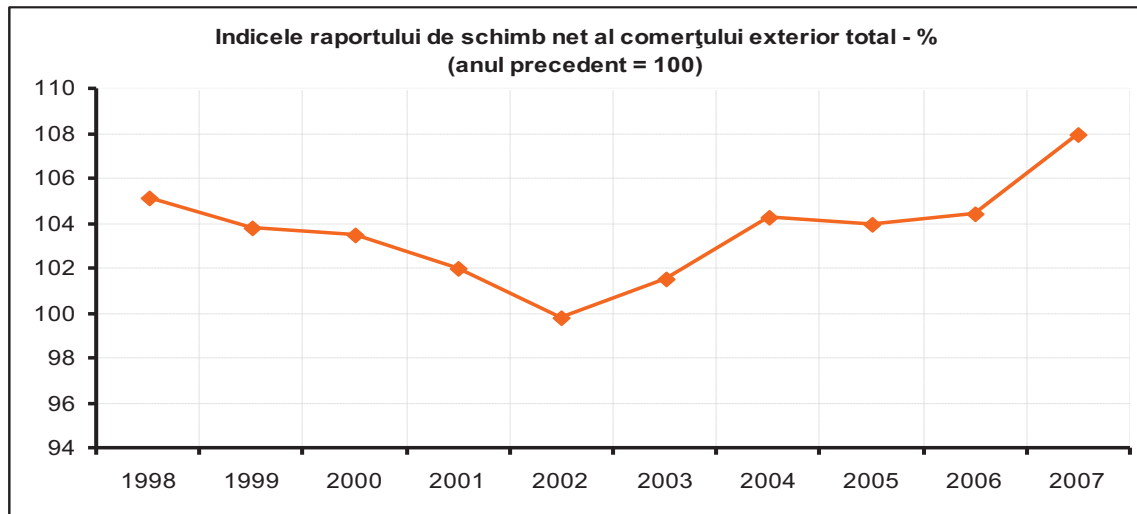
For reasons that are based on trade policy facts, it is necessary to separate between the evolution of trade physical volume and its unit value. This can be done by calculating the trade exchange ratio index.

The index for trade net exchange ratio is often used in international macroeconomic analysis, revealing the efficiency with which the country participates in international trade. Thus, it characterizes the efficiency of external trade evolution compared to the referenced period.

The net trade exchange index is determined as the ratio between the export price index and

$$\text{import price index: } IRSN = \frac{I_{(X)}^{vu}}{I_{(M)}^{vu}} \cdot 100$$

Figure 2. Trade's net exchange index for Romania's total external trade



Primary data source: The National Statistical Institute.

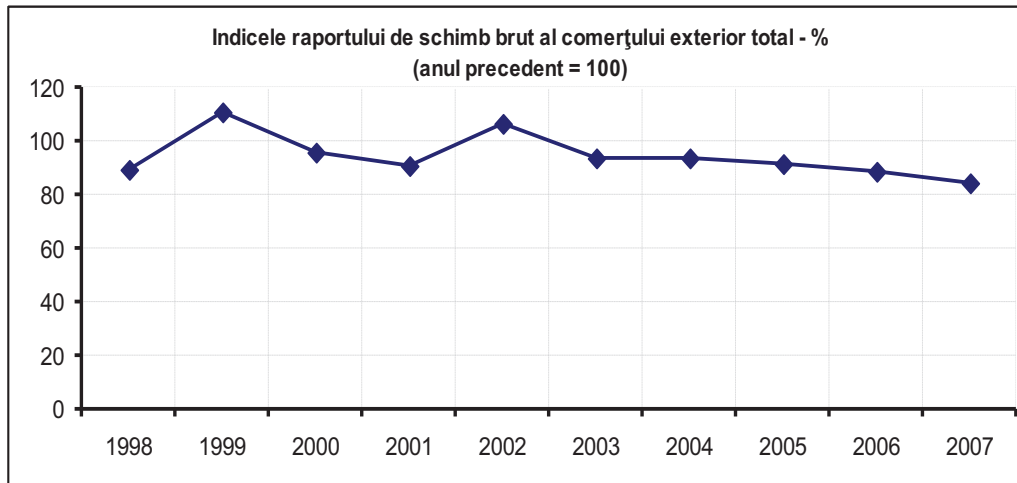
The net trade's exchange index for Romania's case (Figure 2.) has been increasing in the last period considered for the external trade with the EU and for the total foreign trade, which is normal given the significant share of trade with the EU in Romania's exports, especially since 2007, the year of Romania's EU membership. Indices had values over 100 percent, reflecting a favorable aspect for the country's economy, showing import inflation. Thus, the indicator summarizes that export prices rose more than import prices, which has the effect of an overall relative cheap imports compared with the base year.

When comparing the export's physical volume index with the import's physical volume index we obtain the index of the gross exchange, which shows the structural changes in the external trade

$$\text{of the country: } IRSB = \frac{I_{(X)}^q}{I_{(M)}^q} \cdot 100$$

The gross exchange index obtained from the analysis realized for Romania (Figure 3.) noted a favorable trend for a possible option of reducing the deficit of external trade trade. After the year 2003, the indices had a decreasing trend, thus reflecting an improvement in exports, meaning that each unit of measurement of imported goods was "paid" with more than one unit of measurement of exported goods compared to the reference period of the previous year.

Figure 3. The gross exchange index for Romania's total external trade



Primary data source: The National Statistical Institute.

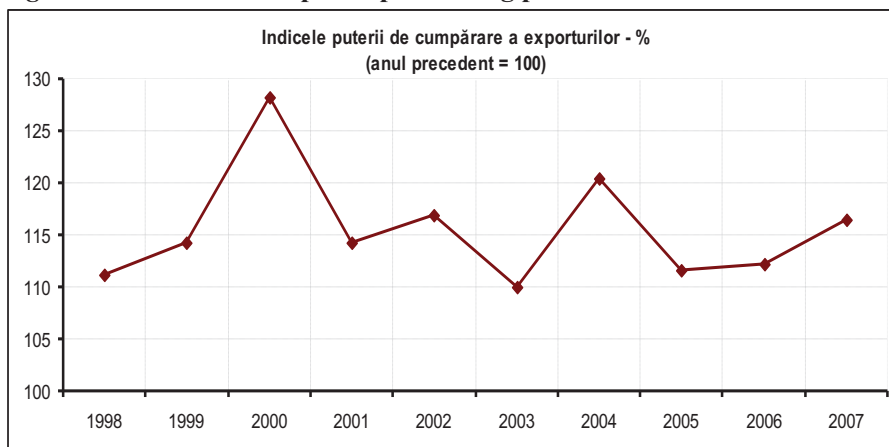
The index of export's purchasing power is the result of the net exchange index's conservation with the index of quantitative export volume and compares the differential change in export and import prices with the quantitative growth of exports:

$$IPCX = \frac{I_{(X)}^v}{I_{(M)}^{vu}} \cdot 100 = \frac{I_{(X)}^q \cdot I_{(X)}^{vu}}{I_{(M)}^{vu}} \cdot 100 = I_{(X)}^q \cdot IRSN \cdot 100 = I^q(M^*)$$

Where: $I^q(M^*)$ is the index for imports obtainable on account of the exports made, which shows how it could import more from the reference year so that the trade balance was not affected.

As stated in a previous paragraph, the index net exchange ratio may increase, as it is desirable in principle, but it may appear the negative effect of a quantitative reduction because of some high prices on the external market. Therefore, by including a physical volume index in the index of purchasing power, we wish to surprise the adverse effect. Such a result is desirable to be above 100 percents and growing, as it was achieved in 2007.

Figure 4. The index of export's purchasing power in Romania's external trade



Primary data source: The National Statistical Institute.

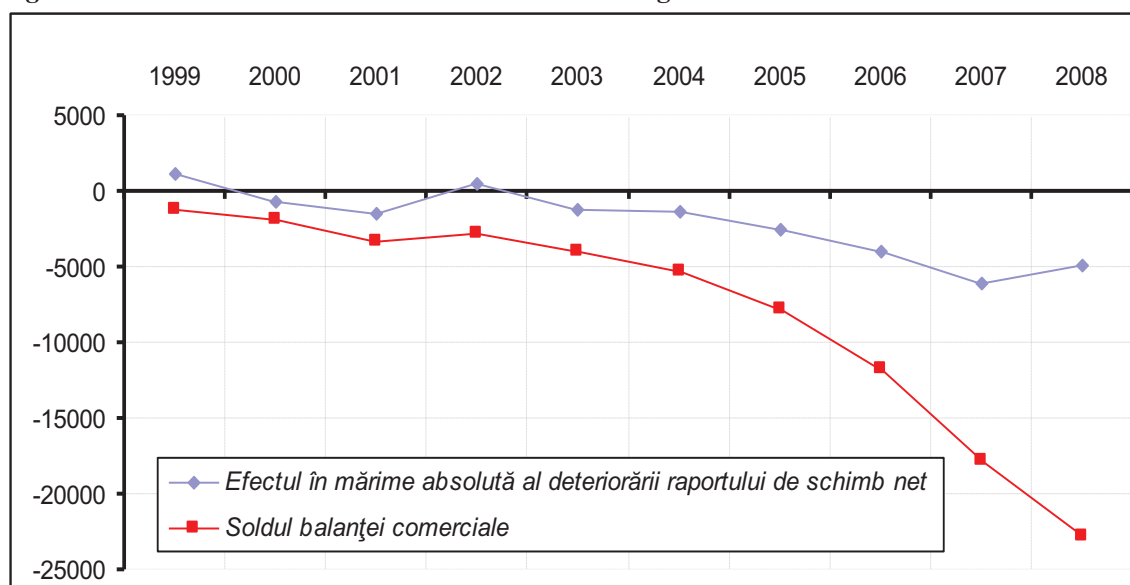
The index of the income from the trade exchange ratio experienced a sinuous trend (*Figure 4.*), with short periods of growth followed by a reduction. The fact that the index of purchasing power noted a slight increasing trend since the year 2005, shows the orientation of Romanian exports rather to markets of higher value products and not an unjustified increase in prices. This conclusion is reinforced by the increasing of the diversification and the intra-industry trade for the years 2006 and 2007.

Another indicator usable for economic decisions is the effect of the absolute value of the external trade net deterioration and its influence on the country's trade deficit.

From the influence of the absolute value of price changes on revenues from exports, we decrease the change in prices' modification on payments from imports, and the result is eventually compared with the trade deficit: $\Delta RSN = \Delta_{(X)}^P - \Delta_{(M)}^P$

The increasing of the negative values for this indicator over the entire period analyzed (*Figure 5.*) highlights once again the trade chronicle external deficit. In 2008, the downward trend of the indicator knows a slight increase in an absolute value.

Figure 5. The effect in absolute value of the net exchange trade's deterioration



Primary data source: *The National Statistical Institute.*

While the causes for the important deficits in the analyzed period mostly tend to maintain after Romania's adhesion to the European Union, the coverage sources until present seem to become more fragile. It seems more likely that the adhesion to the European Union, at least in the short run, will even deepen the intra-comunitary trade deficit, which will increase the share of the European Union's deficit in Romania's total deficit.

However, the adhesion to the European Union also implies an improvement of Romania's image in the international economic relations. This may allow for an easier access to other sources of financing in the international financial markets a possible deficit.

In conclusion, one of the musts for maintaining Romania's macroeconomic stability is the trade deficit decrease, as quickly as possible.

Bibliography:

1. Băcescu Angelica, Macroeconomia relatiilor economice internationale, Editura All Beck, 2002.
 2. Gagea Andreea, Conf. univ. dr. Grigore Liliana, Stănculescu Anca Maria, "Characteristics of Romania's international commercial relations with the European Union", 16th International Economic Conference – „Industrial Revolutions, from the Globalization and Post-Globalization Perspective”, Sibiu, 2009.
 3. Gagea Andreea, Stănculescu Anca Maria, Ștefănescu Mihaela, „Romania's International Economic Relations in the context of the European Integration”, „Quality - access to success" Journal, An 9, Nr. 92, 2008.
 4. Gagea Andreea, Stănculescu Anca Maria, „Romania's economic development in light of a sustainable development perspective”, Supplement of „Quality - access to success" Journal, An 9, Vol. 1, Nr. 94, 2008, pp. 223-232.
 5. Jaba E., Statistică. Ediția a treia, Ed. Economică, București, 2002.
 6. Korka, M., coord., Statistica pentru afaceri internationale, Editura ASE, 2004.
 7. Proudman J., Redding S., Evolving Patterns of International Trade, Review of International Economics 8 (3): 373-396, 2000.
 8. Yılmaz B., Ergun S.J., The Foreign Trade Pattern and Foreign Trade Specialisation of Candidates of the European Union, Ezoneplus Working Paper, No.19, September., 2003.
- Institutul Național de Statistică - www.insse.ro
Eurostat – www.europa.eu.int/comm/eurostat/