ROMANIAN EXPORT COMPETITIVENESS ON THE EUROPEAN MARKET[1]

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Abstract: *Exports of a nation can form a large part of its commercial card on the international market. Global consumer, according to the quality of exports, may associate a certain image about the country of origin. This article aims at explaining the relationship between exports and competitiveness of a nation, the analysis focuses on the nature and intensity of intra-Community exports of Romania. To this end we considered a number of performance indicators that are able to reveal the positioning of trade from Romania to the EU.*

Keywords: exports, competitiveness, performance, trade, indicators
JEL Classification: F14, F15, F16, F40

1. EXPORT PERFORMANCE – AN EXPRESSION OF A NATION'S INTERNATIONAL COMPETITVENESS

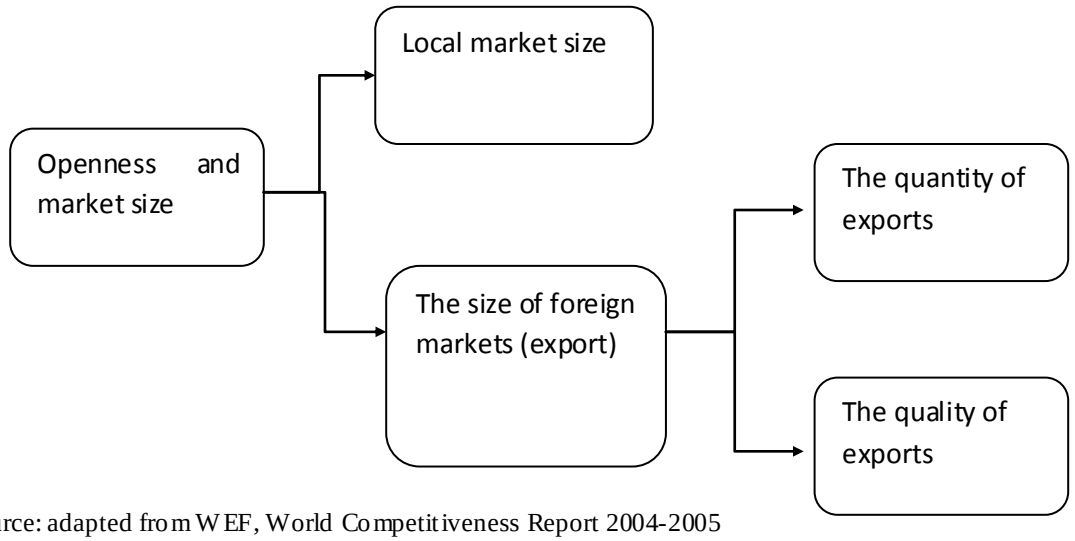
Export performance and competitiveness are often regarded as synonymous. Just like competitiveness of a company can be measured by its market participation through increased sales, competitiveness of a nation is identified with its export performance. However, defining a nation's competitiveness in this way is unsatisfactory because countries do not compete, but companies do. In this case, given that export performance is more a manifestation than a measure of competitiveness, we found it necessary to make a brief foray into the concept of competitiveness in terms of exports of a country.

In one of his fundamental works, Porter (1998) argues that the level of national competitiveness is measured by two sets of indicators: (1) the presence of substantial and sustained exports to a wide range of countries as possible and (2) The significant presence of FDI outflows based on skills and assets created in the mother country. Of course the simultaneous presence of these indicators is feasible only for economies that already can afford to engage in FDI themselves. World Economic Forum assign different weights to these factors in calculating the global index of competitiveness, according to the stage of development of the country.

[1] ACKNOWLEDGEMENT: This work was supported by the European Social Fund in Romania, under the responsibility of the Managing Authority for the Sectoral Operational Programme for Human Resources Development 2007-2013 [grant POSDRU/88/1.5/S/47646]

Stage two of the nation's economic development as surprised by the World Economic Forum, the economies based on efficiency, gives us the answer for export-competitiveness relationship. More specifically, the 10th pillar of a nation's competitiveness, openness and market size, is the one who sits the exports among the determinants of competitiveness.

Figure 1 - Pillar 10 of competitiveness: openness and market size



Source: adapted from WEF, World Competitiveness Report 2004-2005

In this case export quality concerns in particular the presence of "value-added chain." A low score of this indicator, reflecting a high share in the structure of exports of raw materials and low processed goods. In terms of size of foreign markets (exports), the global competitiveness report for 2010-2011, Romania ranks 49 of 139, with a score of 4.3 points from 7, which we indicate above average weight regarding the qualification of exports in high value added products and raw materials, low value added respectively.

Exports becomes particularly important when are defined indicators of competitiveness and international trade by OECD (Durand, 1987). Regarding the first point, the OECD calculates a country's export competitiveness as the difference between its export prices in a market and export prices of its competitors in the same market.

Porter and Delgado (2008) draw attention to the danger of accepting a very intuitive definition of competitiveness, namely when it is regarded as the nation's market share for its products. Viewed strictly in this sense, competitiveness is a zero sum game. Any increase in market share for a country becomes a loss for another. In fact, this view is not only to support interventionist measures (export subsidies, artificial restrictions to cut wage costs, devaluation of national currency interventions) promoted by certain countries. Correct view is that competitiveness is measured by productivity, the latter leading to prosperity of a nation and productivity "*is measured by the value*

of goods and services produced per unit of labor, capital and natural resources of the country." (Porter and Delago, 2008, p.52).

Regarding the definition of international competitiveness through market share, even subscribe to this definition, Krugman makes keeping some reservations given that "*for an economy with a very low level of international trade, competitiveness will be transformed into another mode to say "productivity" and will have nothing to do with international competition* "(Krugman, 1994, p.32). Krugman wants to stress that we should not neglect the internal aspects of competitiveness if we are to get a sound external side of it.

Michael Porter chooses to interpret competitiveness as arising from productivity with which a nation uses its resources in a kind of economic activity, the competitive advantage locating that level of productivity that allows companies to achieve substantial and supported exports in the international market by a significant number of countries or to generate significant flows of FDI. Therefore, the level of exports, given that behind them is found a high level of productivity, expresses the best competitiveness of a nation: "*We chose the best ways to measure international competitiveness, the presence of substantial and sustained exports to a wide range of countries as possible*." (Porter, 1998, p.31).

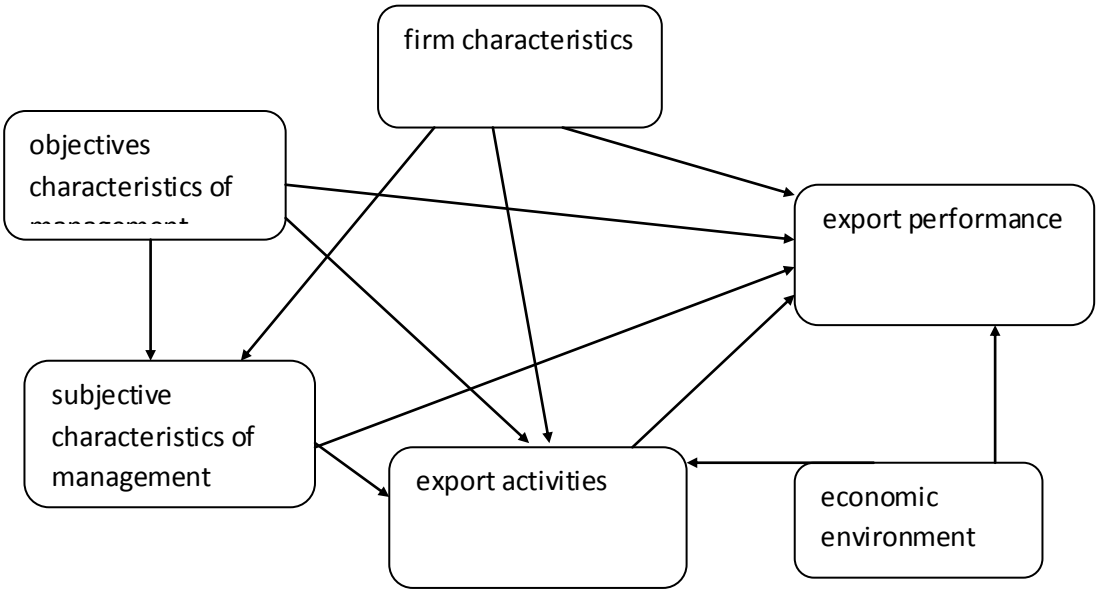
The presence of "*substantial and sustained*" exports can be an indicator of competitiveness, only given that generating source is based on productivity and not the result of interventionist practices designed to sustain artificially high levels of exports.

Lately, questions began to emerge (Rodrik, 2009; Ketels, 2010) about the reliability of export-oriented strategies practiced by developing countries. These questions arise due to development of such strategies based exclusively on export growth by any means, neglecting a very important aspect, namely productivity growth of domestic firms. Another problem would be the economic downturn in developed countries, to which many of these exports goes. The optimal solution proposed by Ketels (2010) would be to develop a strategy to increase competitiveness in general, exports are only part of the whole, a means and not an end, the ultimate goal being to prosperity.

For export performance to bear on his shoulders some of the significance of competitiveness of a nation, should be supported by a series of well-defined factors in the firm and the nation.
Through laborious research based on the results of 43 relevant empirical studies, conducted between 1987 and 2002, Voerman (2003) attempts to explain the export performance of European small and medium enterprises, by highlighting their determinants. Conclusions lead to the existence of five major components able to influence the competitiveness of exports: (1) economic environment, (2) firm characteristics, (3) objectives characteristics of management, (4) subjective characteristics of

management and (5) export activities. All these components do not behave independently from each other but interact at different levels with a certain intensity. Concerted action of these characteristics determines export performance. A picture of these relations can be seen in the figure below:

Figure 2 - Determinants of export performance networking



Source: adapted from Voerman (2003, p. 79)

Foreign Direct Investment are among the determinants of export competitiveness, but in turn, this type of investment effects the other factors that influence export activity, thus creating a spiral designed to raise and support the export capacity of firms in an economy. Therefore, the role that FDI play in determining the competitiveness of exports must be viewed in terms of export determinants. At a closer look we can easily see that FDI can influence most of the factors included in Figure 2 and the effects are transmitted toward which means export competitiveness.

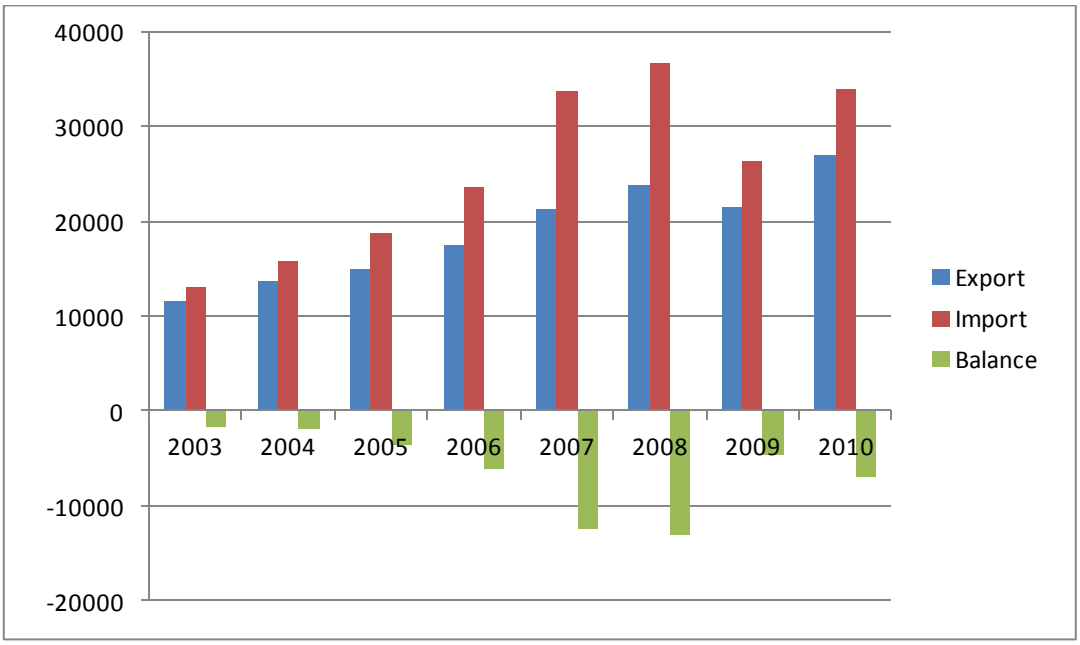
At the level of international trade, a country will make its presence felt through the products directly associated with it or its associated companies, whether they enter through exports or different types of FDI. Depending on the stage of development, penetration channels will oscillate between these two forms of international trade. Quality and quantity of exports is certainly a form of expression of a nation's competitiveness. However, to maintain quality of this indicator, it is necessary to avoid the trap of promoting them by any means, thus neglecting the productivity side. This is especially desirable as, for example, the exchange rate may represent a compensatory force,

by subsidizing exports, but also increase the cost of imports, affecting both domestic consumption and export-oriented industries as their proxy raw materials from imports (Rodrik, 2009).

2. PRE AND POST-ACCESION DEVELOPMENTS OF ROMANIAN EXPORTS WITH THE EU

Trade balance in relation to the EU for the period 2003 - 2010 is influenced by two major events: EU accession and economic crisis. Between 2003 and 2007 we can use the term trade relations with the EU; since 2007 we can use the term intra-trade relations. General trend of trade activity is increasing and presenting certain peculiarities arising from the two times outlined above. Trade balance can be traced in the following chart:

Figure 3. Romanian trade balance in relation to the EU, 2003 – 2010



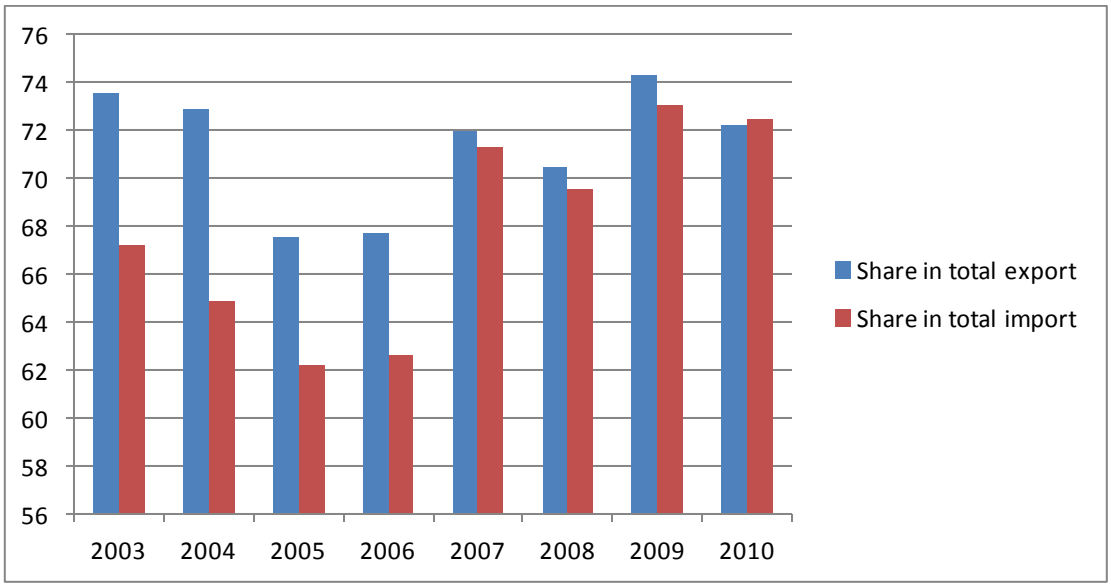
Source: Balance of Payments 2003-2009 and for 2010 Monthly Newsletter of the Romanian Center for Foreign Trade and Investment Promotion.

Coverage of Romania's EU accession in 2007 in the evolution of trade balance is quite obvious and it is particularly on import side. Imports show a rapid increase, while exports to the EU market remains at the same growth rate. The consequence of this development is represented by an increase in trade deficit in the years to come, it jumps from 6025 million in 2006 to 13,006 million euros in 2008. These facts support the idea that, at least initially, Romania was mainly a new market outlets for the old EU Member States, trade especially showing a favorable trend in one direction,

from the EU to Romania respectively. Thus in 2009 and 2010 while exports are characterized by the same trend imperturbable (a small exception in 2009 when exports fall, but was offset by a significant increase in 2010), the level of imports decreases significantly below those recorded in 2007, thereby reducing the trade deficit to levels comparable to Romania in the years leading up to EU entry.

Oscillations in the evolution of trade between Romania and EU, are found in high proportion in the general development of trade, the share of trade with the EU is quite large, which is shown by the following chart:

Figure 4 - Evolution of the share of EU trade in total foreign trade of Romania



Source: own calculations according to Romania's Balance of Payments 2003 – 2010

This graph confirms the results previously discovered, 2007 leaving its mark on the evolution of trade between Romania and the EU. Completion of the EU accession process brings a balance in terms of share of exports and imports in total foreign trade balance with imports coming from the EU on their shift. Also in 2010 was recorded the first time a twist on the weights of the two components of foreign trade, imports from the EU rate exceeding that of exports to this area.

3. INTRA-COMMUNITY TRADE – PERFORMANCE INDICATORS

To emphasize the nature of commercial relations between Romania and EU we considered the first 10 EU countries as importance in trade relations, aggregate share of these exports exceed 60%

of the total Romanian exports to EU. Once established these guidelines we have explained a number of indicators that show qualitative and quantitative aspects found in bilateral trade relations established by Romania with individual countries of the consideration.

A first indicator that we stopped is **Trade Intensity Index (TII)**. It is used to determine if the value of trade between two countries is higher or lower than would be expected according to their importance in world trade. The calculation formula is as follows:

$T_{ij} = (x_{ij}/X_{it})/(x_{wj}/X_{wt})$

where

x_{ij} and x_{wj} are the values of exports of country i and world exports to country j;

X_{it} and X_{wt} are the total exports of the country i, respectively the world export;

If the index is higher than one, then bilateral trade flows between the two countries is higher than expected and vice versa if the value is less.

According to data provided by the World Bank through WITS (World Integrated Trade Solution), in 2007 Romania recorded values higher than one of the TII with a total of 13 countries comprising EU 27 (Austria, Bulgaria, Cyprus, Czech Republic, Germany, France , Greece, Hungary, Italy, Malta, Poland, Slovakia and Slovenia). The following year the number of countries in this category increased to 14, Spain is one who joins this group. Year 2009 keeps the same trend, the number of countries with which Romania has rates higher than one of TII was 15 (Sweden joining), and for 2010, also Sweden is one that reduces their number to 14. Therefore, the index values higher than one of trade intensity is obtained for more than half of EU countries. The evolution of these values for the main trading partners are presented in the following table:

Table 1 - Evolution of TII for Romania's main export partners

Partener	2007	2008	2009	2010
Austria	2.3176	2.2581	2.3115	2.4683
Bulgaria	18.3187	21.8207	24.3125	24.4593
Germany	2.4632	2.4960	2.9433	2.9244
Spain	0.9209	1.0481	1.5265	1.6684
France	1.7792	1.7848	1.9767	2.2052
UK	0.9504	0.8322	0.8875	1.0222
Hungary	8.6669	8.3535	8.2630	9.3344
Italy	5.2809	4.8349	5.2233	4.9912
Netherlands	0.5953	0.8338	0.9805	0.8330

Poland	1.7920	1.5801	1.9094	2.3344

Source: own processing after the World Bank WITS

In general TII values in the four years after Romania's EU admission shows upward trends, in two cases, Spain and the UK, recorded the transition from subunit values to values higher than one.

Trade Complementarity Index (TCI) measures the extent to which a country's export performance meets the needs of the countries import from the same economic area. This is calculated using the following formula:

$TC_{ij} = 100(1 – sum(|m_{ik} – x_{ij}| / 2))$

x_{ij} - share of good i in total exports of country j;

m_{ik} - weight of good i in the total imports of country k;

It can take values between 0 and 100, as they are closer to the right end of the range, the country exports more overlap over the import needs of trading partners. Processing the data offered by the World Bank revealed that the lowest value of TCI is registered in 2010 in relation to Malta which is 37.40 and the highest is found in the same year in trade with Slovakia (73, 44). The values for the top 10 trade partners of Romania in the EU are found in the following table:

Table 2 - Complementarity Trade Index of Romania with major partners in the EU

Parteneri	**2007**	**2008**	**2009**	**2010**
Austria	68.3189	68.5382	67.8918	68.9272
Bulgaria	65.3028	67.3498	58.8388	57.4134
Germany	69.0954	69.4633	67.7669	68.0452
Spain	67.5281	69.9063	65.9288	66.3910
France	65.0230	66.8085	64.7967	65.3880
U K	64.6189	65.7827	65.1959	65.2579
Hungary	64.0767	68.4583	67.1023	68.0716
Italy	67.4728	68.6562	66.8894	67.8122
Netherlands	61.2272	60.6224	56.3282	55.9293
Poland	68.1242	68.6120	65.4797	65.4191

Source: own processing after the World Bank, WITS

Values are above average in many cases approaching 70, which indicates commercial relationships in which export supply folds quite well (in 70%) on the demand partners. The ability to cover the needs of trading partners, over 60%, indicates a fairly good potential for trade development and it being found in the actual values of exports directed to EU countries.

The next indicator, on which we turn analysis is **Export Specialization Index (ESI)**, which provides information on products in which a country has a comparative advantage over its trading partner and is calculated using the formula:

$ESI = (x_{ij}/X_{it}) / (m_{kj}/M_{kt})$

Numerator expresses the country i export values for product j, respectively the country's total exports, while in the denominator are represented imports of the product j on the k country market, respectively the country k total imports. Subunit values indicate the presence of a disadvantage compared of product j on k market, and values higher than one show a comparative advantage. An inventory of ESI values confirming the existence of export specialization in certain products in the EU market economies, is shown in the table below in descending order:

Table 3 - Romanian exports specialization on the European market (ESI)

ESI	Year	Partner	Groups of products
3.2025	2007	Italy	Footwear, gaiters and the like;
2.3394	2008	Italy	Footwear, gaiters and the like;
2.0251	2007	Italy	Silk
1.9414	2008	Italy	Silk
1.7218	2007	Italy	Articles of apparel and clothing accessories
1.6535	2009	Italy	Footwear, gaiters and the like;
1.5767	2010	Italy	Footwear, gaiters and the like;
1.5189	2009	Italy	Silk
1.4893	2007	Italy	Fertilisers
1.4400	2008	Italy	Articles of apparel and clothing accessories
1.4325	2007	Germany	Articles of apparel and clothing accessories
1.2802	2008	Italy	Zinc and articles thereof
1.2446	2008	Germany	Railway or tramway locomotives, rolling-stock
1.2162	2009	Germany	Railway or tramway locomotives, rolling-stock
1.1755	2009	Italy	Tobacco and manufactured tobacco substitutes
1.1630	2008	Germany	Articles of apparel and clothing accessories
1.1498	2010	Italy	Silk
1.1390	2009	Germany	Ships, boats and floating structures
1.1363	2008	Poland	Lead and articles thereof
1.1094	2010	France	Oil seeds and oleaginous fruits;
1.0874	2009	Italy	Articles of apparel and clothing accessories
1.0762	2009	Germany	Wool, fine or coarse animal hair; horsehair

1.0659	2010	Italy	Tobacco and manufactured tobacco substitutes
1.0339	2008	France	Oil seeds and oleaginous fruits;

Source: own processing after the World Bank, WITS

A first important observation is that the interval after Romania's EU accession, the values of the ESI are higher than one compared with only four EU countries: Italy, Germany, France and Poland. Number of product groups for which records these values is very limited. According to the HS2007 nomenclature which was performed by processing, from a total of 99 product groups, Romania is specialized in only 11 in dealing with trading partners and the 11 groups are distributed over four years. The highest recorded value (3.2025) is found in 2007 in trade with Italy in the group of goods *Footwear, gaiters and the like*. In fact the first 10 largest index values are obtained from commercial relations with this country on four groups of products: *footwear, gaiters and the like, silk, apparel and clothing accessories of articles, fertilisers.* In 2007 five groups record values higher than one, four in a relationship with Italy and one with Germany. The beginning of the economic crisis, namely 2008, finds Romania with a surprising number of eight groups of goods for which ESI is higher than one. This can be explained in terms of how the crisis were propagated in different economies. In Romania they have appeared with some delay. In 2008 trading partners for which ISE is greater than 1, is already affected to a greater extent of this economic phenomenon. Years 2009 and 2010 shows a decrease in the number of product groups in comparative advantage, leading to a total of four such goods at the end of 2010.

CONCLUSIONS

International trade relations, more than ever, represents today the way to can hope to raise living standards and welfare of the nation, issues that are or should be the final objective for any country.

In these circumstances, exports are materialized in one way forward to achieve the above objectives. Moreover, as their competitiveness is based on a higher proportion on high productivity, the quality or the innovative aspects and not on economic fireworks (excessive subsidies for exports, devaluation of national currency intends), the more growth result will be a solid, healthy based on the driving term.

Romanian exports to the European Union includes over 60% share amounting to approximately 70% of total exports. This situation is normal in at least two perspectives. First, geographic proximity helps carry these flows, the share of transport costs in total costs decreased

significantly. Secondly membership of a union in which most trade barriers have been abolished successfully completed significant weights explanation to this market. Over these two also adds the high values obtained for Trade Complementarity Index, which leads to normality support of this. On the other hand, weak values of exports specialization index to this area lead us to turn our attention to diversification both structurally and geographically. In this way is reduced excessive dependence on exports of a particular product range or a single geographical area. Along with reducing this dependence are reduced and risks arising from such an association.

Although we highlighted less pleasant aspects related to trade between Romania and EU, we must see huge benefits resulting from membership, counting among the most important gain is obtained in terms of quality of exports, due to high exposure to the competitive environment and FDI flows from this area.

REFERENCES

Durand, M., Giorno, C. (1987) *Indicators of international competitiveness: conceptual aspects and evaluation*, OECD Economic Studies.

Krugman, P. (1994) *Competitiveness: A Dangerous Obsession*, Foreign Affairs, Vol. 73, No.2(Mar.-Apr.,1994), pp. 28-44.

Ketels, C.(2010) *Export Competitiveness: Reversing the Logic*, World Bank Publication, NBR, Balance of Payments 2003-2009.

Porter, M. (1998) *The Competitive Advantage of Nations*, Free Press, New York, 1990.

Porter, E. M., Ketels, C., Delgado, M. (2008) *The Microeconomic Foundation of Prosperity: Findings from the business Competitiveness Index*, The Global Competitiveness Report, 2007-2008, World Economic Forum.

Rodrik, D. (2009) *Growth After the Crisis,* accessed on September at www.growthcommission.org/storage/cgdev/documents/financial_crisis/rodrikafterthecrisis.

Romanian Center for the Promotion of trade and FDI, Monthly Newsletter, 2010.

World Economic Forum, *World Competitiveness Report 2004-2005*.

www.worldbank.org.European, Iaşi, 2005.