THE STRATEGIC ROLE OF EXPORTS IN TRADE EXPANSION AND ECONOMIC GROWTH FOR ROMANIA

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ABSTRACT
This paper investigates the role of quality and quantity of exports in trade expansion and in economic growth. The relationship between trade expansion and economic growth has been the subject of discussion for many economists. This study done for Romania will try to determine the connection between exports and economic growth in our country using a global picture of GDP and international trade, as well as their growth, from 1990 until nowadays. Also, the evolution of the revealed comparative advantage and the market share for the main Romanian exported commodities will be studied for the above mentioned period. In addition, the paper will analyze the decomposition of export growth through market share and through price.

KEYWORDS: *economic growth, exports, GDP, international trade, Romania*

JEL CLASSIFICATION: *F10, F43, L60, O10, O52*

1. INTRODUCTION

This paper concerns Romania in the period starting after the last year of communism until today democracy, based on certified trade statistics data. In December 1989 the former centrally planned Romanian economy was replaced by a capitalist economy based on the market mechanism. Even today, after almost 25 years passed from the year of change, Romania could still be considered in transition; our interest is to determine the connection between exports and economic growth in Romania, as well as the influence of quality and quantity of exports in trade expansion.
The relationship between trade expansion and economic growth has been the subject of discussion for many economists. Trade is bringing countries together within the trade markets and at the same time is reinforcing competition between them. Trade expansion gives access to producers to larger markets and consumers to a wider variety of products. So, producers will increase the diversity, quality and quantity of their products and consumers will benefit of lower prices. In this manner productivity will increase leading to economic growth; the impact of trade development on growth justifies the interest of studying this connection between trade expansion and economic growth.

2. RELATED LITERATURE

The relationship between trade and economic growth was analyzed along time by many reputed economists to determine the impact of trade on economic growth. Trade expansion and liberalization affect economic growth in different ways. Thus, a greater openness to trade accelerates competition in markets, which increases economic productivity and finally leads to

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economic growth. Miron (2003) concludes that "Countries with the most open economies to external economic environment have more to gain over medium and long term". Also, trade is seen by economists as a vehicle through which know–how and access to specific inputs are exchanged between trading partners, thus economic growth is promoted.

But economic growth is a complex subject and trade is only one element in interaction with many other factors. Empirical linkages between long run growth and different explanatory variables are searched in literature using cross country regressions. So, a study done by Robert J. Barro (1996) shows that "the growth rate is enhanced by higher initial schooling and life expectancy, lower fertility, lower government consumption, better maintenance of the rule of law, lower inflation, and improvements in the terms of trade" for a given starting level of real per capita GDP. Barro & Sala-i-Martin (1995) showed that "In the long run, growth depends on the discovery of new products or technologies in a few leading economies". Levine & Renelt (1992) conclude that "the impact of trade on growth is done through investment more than through other efficiency gains. This conclusion is based on the positive link between the average growth rates and the ratio of investment to GDP and also on the same positive effect between the average share of investments in GDP and the ratio of export to GDP "; this conclusion means that growth may be also analyzed linked to trade. Another factor which is considered by Lee (1995) is the quality of imported goods; the author concludes in his study that "the ratio of imported to domestically produced capital goods in the composition of investment has a significant positive effect on per capita income growth rates across countries, in particular, in developing countries." So, another factor of economic growth is pointed out by Lee Jong-Wha as the composition of investment and it is underlined that "the growth rate is higher in a country that uses relatively more imported capital goods for the production of capital stock".

Besides this variety of macroeconomic, political or institutional variables an important effect on economic growth is brought by the trade policy, which is considered one of the most important policy instrument used in the industrialization of developing countries.

3. AN OVERVIEW OF ROMANIA'S ECONOMY AND INTERNATIONAL TRADE

At the beginning of 1989 Romania was part of a communist system, including the East-European countries, with centrally planned economies, meaning that all economic decisions were made by the government as state representative. The 24 million Romanians were only a small part of the 400 million people living in countries with economies led through central directive instead of a decentralized market mechanism.

The fall of communism in the period 1989-1991 in the East European countries and the Soviet Union, which broke apart into many separate republics, changed dramatically the political situation in this region of the world. These formerly centrally planned economies of the ex-communist countries are known as transition economies as they are involved in the transition process to market economies. The main characteristics of the transition period to a market economy (1990–1996) included a hyper-inflation phenomenon, the deindustrialisation and an accelerated privatization process, a significant increase in unemployment rate and the polarity of the economy.

In 1993 Romania has signed the European Agreement with EU-15. Its implementation has led to a significant increase of trade between Romania and the EU, both in terms of imports and exports. In Romania, the trade balance shifted from surplus to deficit in 1992, and deficit has increased over time. Also the external public and private debt of Romania has increased from null in the late 80's to $100 billion in 2009 and further to $133 billion in 2013. Between 2000 and 2007, there was an increase in exports of high value added goods, but not major changes in competitiveness, so that the trade balance recover. The year 2009 has marked record levels of GDP and exports. Romania was affected by the economic crisis in the end of 2008 but also in 2009. After 2010 a slight comeback growing is registered with a maximum GDP and exports values reached in 2013.

The major events that influenced Romania's economic evolution include the following: Jan 01, 1995 – Romania becomes a member of the World Trade Organisation and then Jan 01, 2007, Romania becomes a member of the European Union.

4. EVOLUTION OF TRADE AND GDP IN ROMANIA

Romania's foreign trade had a decreasing trend after 1990 until 1992, then a fluctuant evolution until 2000 and generally an increasing trend after 2000; record levels in exports and imports of goods and services were reached in 2008 after a growing period. The year 2009, further the effect of the economic crisis, marked a reduction in economic activity with a direct impact on foreign trade. The trade declined heavily in 2009. In the next years until 2013 compared to 2009 there was a slight comeback oscillating trend with a second exports maximum reached in 2013. GDP's evolution for the same period was very much looking like exports' evolution; a maximum was reached in the same year 2008 and after an oscillate flow a second maximum reached in 2013. We may say that for the whole period from 1990 until 2013 the appearance of GDP, imports and exports graphics was very similar and their evolution was apparently connected.
Figure 1 presents the evolution of GDP, imports and exports for all years between 1990 and 2013 (World Development Indicators, n.d.). Looking closer to the values in figure 1 we can notice that whenever exports are growing, contributing to GDP's growth, GDP is growing also. However exports' growth is faster than GDP's growth, except 2012. In 2008 GDP is reaching its top value of $204.3 billion for the whole period and exports' value of $62.2 billion is among the highest ones. In 2013 exports are reaching their top value of $79.6 billion and consequently GDP has a second maximum of $186.6 billion.

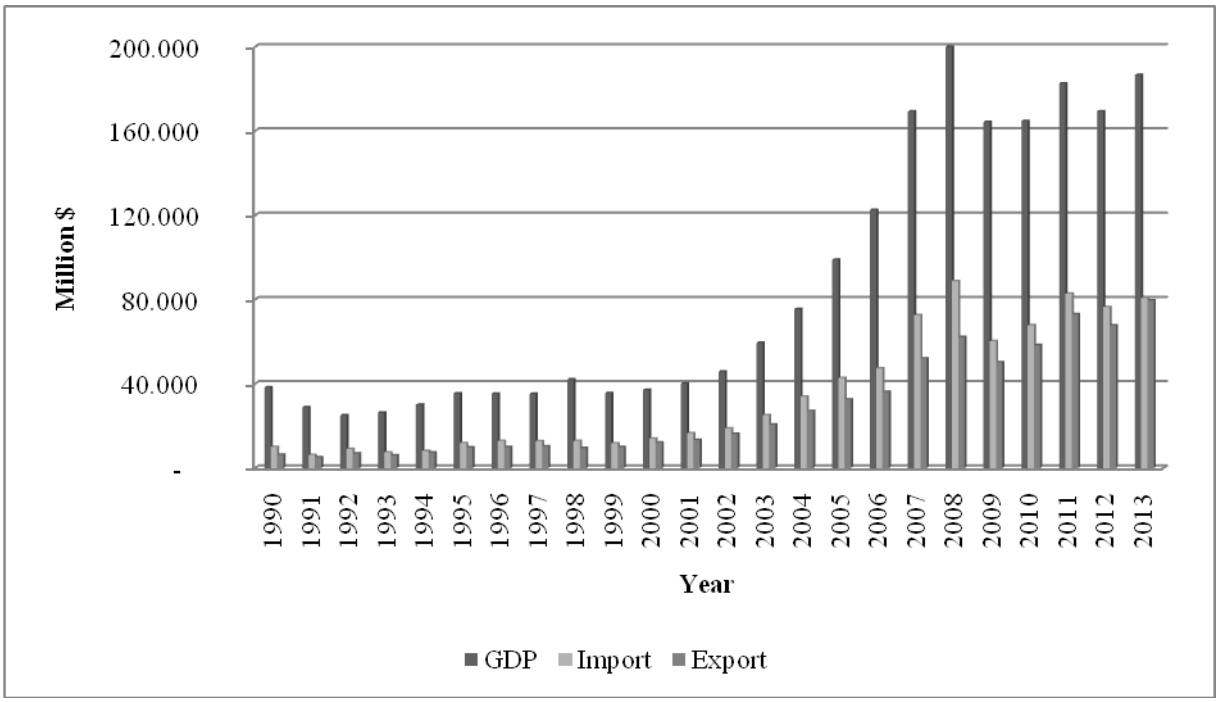

Figure 1. Evolution of GDP and international trade
Source: made by authors based on World Bank Database

In figure 2 we may observe for the analyzed period the annual growth of GDP and also the annual growth of imports and exports of goods and services (World Development Indicators, n.d.).

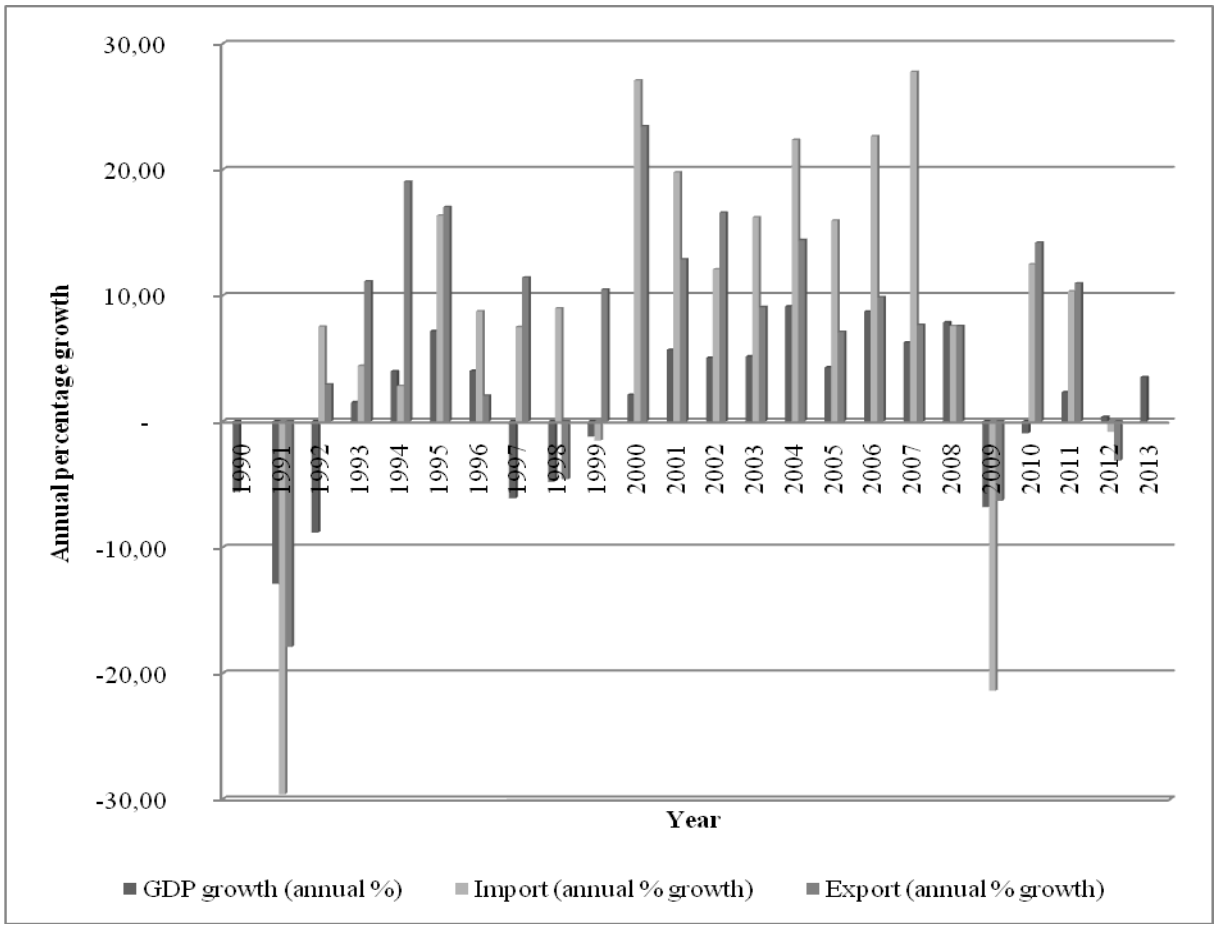

Figure 2. GDP and international trade growth
Source: made by authors based on World Bank Database

Between 1990 and 2013 GDP's growth has fluctuant values which become negative several times. This is the case for the first period after the revolution in December 1989, between 1990 and 1992, between 1997 and 1999, and also after the best year 2008, in 2009 and 2010. However Romania's GDP growth between 2000 and 2008 is superior to EU's GDP growth (Real GDP growth rate, n.d.). In 2009 the crisis effects were worse for Romania than for EU (i.e. -6.6% for Romania compared to -4.5% for EU) and while EU recovered quickly to positive growth in 2010 (2%) Romania's GDP growth was still negative in 2010 (-1.1%). Between 2011 and 2013 Romania's GDP growth is again superior to EU's GDP growth.

An analysis of Romania's trade growth after 2000 quickly puts out that exports' growth was generally superior to GDP's growth, except 2008 and 2012 and the value of Romania's total imports has been every year higher than Romania's total exports, meaning that the balance of trade remained still negative.

A second remark could be done considering the trade volume, either for exports or imports, with EU countries. Trade with EU represents for Romania the most important value exchange with a ratio increasing continuously for exports and imports after joining EU. The graphic representation (figure 3) of the evolution of exports and imports reveals the increase of trade flow from 2006, before joining the EU (Romanian Statistical Yearbook 2007, 2008) to 2007 as an EU member (Romanian Statistical Yearbook 2008, 2009). So, a third characteristic of trade is that the growth rate of EU trade is much higher than all other ones.

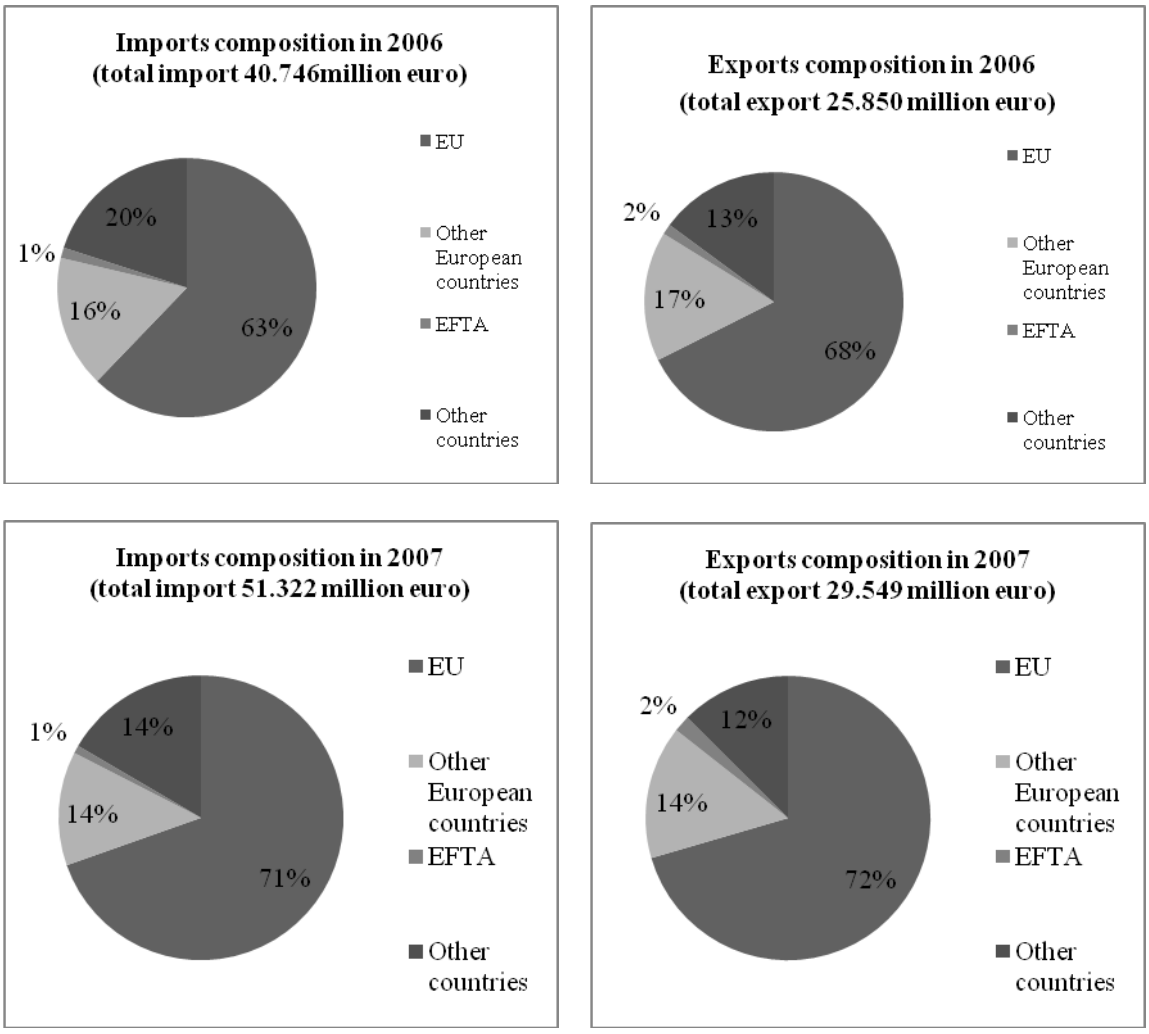

Figure 3. Evolution of exports and imports before and after joining the European Union
Source: made by authors based on National Institute of Statistics

Romania's foreign trade had an ascending trend almost for the whole studied period, reaching record high in exports in 2008 and later in 2013. After 2008, when a local maximum exports' value is reached, the decrease of economic activity had a direct impact on foreign trade and only 2011 marked a slight rebound upward trend. This development is the result of the adjustments induced by the economic crisis to the Romanian economy by reducing the domestic and external demand. Finally, in 2013 exports' value reaches an absolute maximum for the entire period.
Concerning Romania's exports' destination countries, the main EU trade partners are Italy, Germany, France, United Kingdom, Hungary, Bulgaria and Austria and non EU partners are Turkey, the Russian Federation, Ukraine, USA and China. At the same time from these countries are also imported large quantities of goods; so these countries are also the main importing countries for Romania.

5. EVOLUTION OF MAIN ROMANIAN COMMODITIES

We first identified the main Romanian exported commodities in 2013, according to HS standards and using the United Nations Commodity Trade Statistics Database (UN Comtrade). Based on UN Comtrade data and using a step of five years from 1990 we followed the evolution of these commodities until nowadays. Specific data was used to draw in figure 4 the composition of Romania's exports between 1990 and 2013 (World Development Indicators, n.d.).

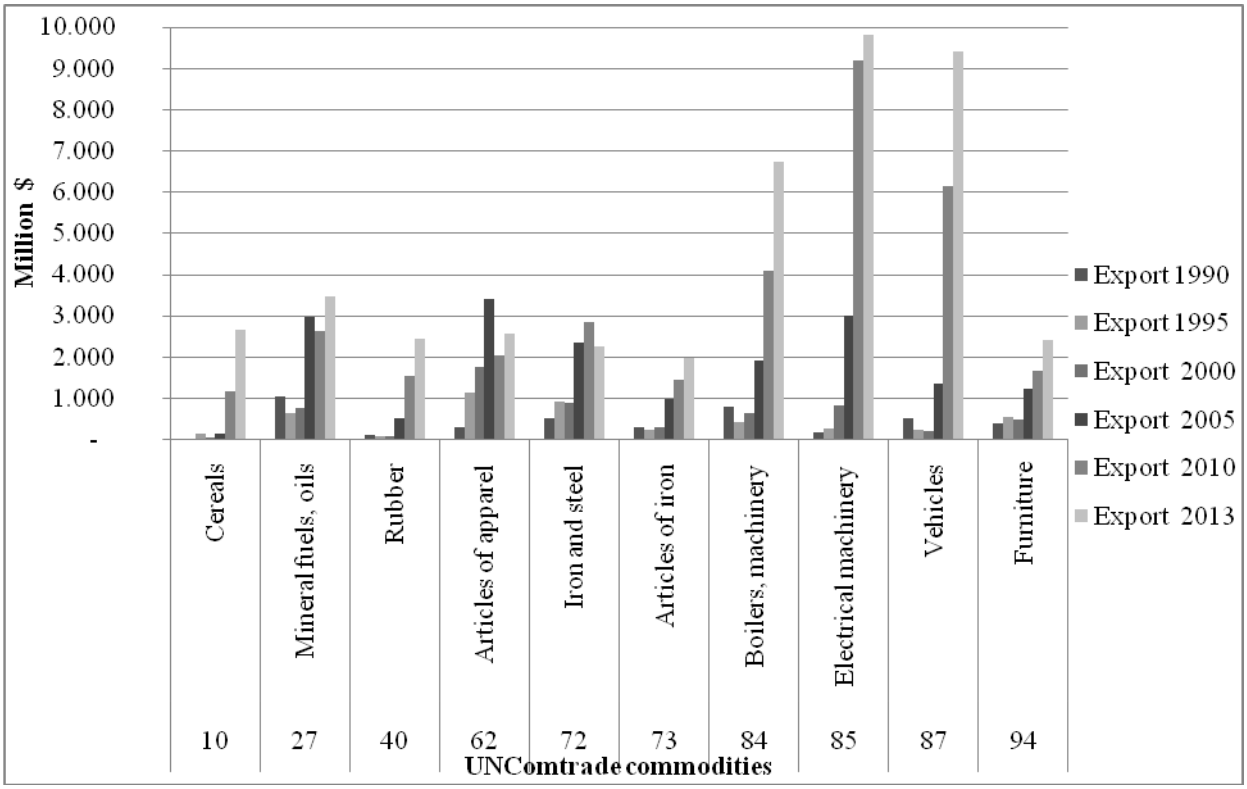

Figure 4. Romania's exports composition between 1990 and 2013

Source: made by authors based on United Nations Commodity Trade Statistics Database

Analyzing exports data we may notice a change in exports' structure from 1990 to 2013. Thus, Romania is generally exporting nowadays less rough or low processed materials than it did in 1990. Romania seems more industrialized in 2013, when the first commodity exported in 1990, "mineral fuels, oils" representing 17.8% of exports by that time, represents in 2013 only 5.2% of exports. In 2013 there are ranked on the first three places commodities involving more manufacture and processing. So, the top exported commodities are the following: "electrical machinery and equipment" representing 14.9% of exports, "vehicles" representing 14.2% of exports and "boilers, machinery " representing 10.2% of exports. In fact, "electrical machinery and equipment" has increased 62 times from 1990 to 2013, while at the world level the increase was of only 15 times during the same period; also, "vehicles", placed on the second rank, have increased reported to 1990 more than 18 times.

The exports' composition in 2013 leads to the same conclusion as we may see that some rough and low processed commodities diminished their presence in Romania's exports in 2013 compared with 1990. Instead of these commodities some others appeared or increased their presence in 2013, when the panel is dominated by goods involving more industrial processing.

After ranking the first ten exported commodities in 2013 we have computed their associated revealed comparative advantage index. The revealed comparative advantage index (RCA) compares the share of exports of a particular good for a country (i.e. Romania) to the share of the same exports in world exports. Values of the RCA index higher than 1 mean a revealed comparative advantage for the product taken into account (Krugman & Obstfeld, 1997).

$$RCA = \frac{X_m^i / X^i}{X_m^w / X^w} = \frac{S_m^i}{S^i} \quad (1)$$

Where X^i_m are the exports of country i for a product "m", X^i are the total exports of country i, , X^w_m are the word exports for a product "m", X^w are total word exports, S^i_m is the world market share of country i for a product "m" and S^i is the aggregate market share of country i.
The revealed comparative advantage computed based on the formula above could also be seen as the world market share of country i for product m relative to country i's aggregate market share.
Based on the detailed exports data extracted from the United Nations Commodity Trade Statistics Database we computed the revealed comparative advantage for the top ten exported goods in 2013, from 1990 to 2013 with a step of five years.
Results for revealed comparative advantage evolution from 1990 until 2013 are included in table 1, below.

Table 1. Evolution of revealed comparative advantage for main commodities

Code	Description	RCA 1990	RCA 1995	RCA 2000	RCA 2005	RCA 2010	RCA 2013
10	Cereals	0.00	2.18	0.62	0.75	4.38	5.96
27	Mineral fuels, oils	3.19	1.50	0.76	0.64	0.38	0.36
40	Rubber	1.29	0.69	0.65	1.36	2.75	3.14
62	Articles of apparel	3.21	7.90	10.74	6.30	3.82	3.76
72	Iron and steel	3.14	4.39	4.34	2.24	2.26	1.50
73	Articles of iron	2.71	1.83	1.95	1.50	1.80	1.67
84	Boilers, machinery	0.87	0.34	0.41	0.37	0.68	0.87
85	Electrical machinery	0.23	0.24	0.50	0.57	1.42	1.25
87	Vehicles	0.67	0.32	0.20	0.39	1.71	1.79
94	Furniture	6.55	5.71	3.67	2.64	3.00	2.77

Source: made by authors based on United Nations Commodity Trade Statistics Database

We may notice in 2013 index values bigger than the unit for eight goods. So, values of the RCA index bigger than 1 are registered for commodities whose values were also in 1989 bigger than the unit, such as "iron and steel", "articles of iron and steel", "furniture", "articles of apparel" and "rubber". Except the last two commodities, with an oscillating trend in the studied period, all others have generally a decreasing trend, meaning the decrease of world market share of Romania for these commodities reported to Romania's aggregate market share.
Other commodities, such as "vehicles" and "electrical machinery", whose values were lower than 1 in 1990, register in 2013 index values bigger than the unit. For these commodities we must notice the biggest increases of RCA between 1990 and 2013, of almost 3 times for "vehicles" and of more than 5 times for "electrical machinery".
For other goods such as "rubber", "articles of apparel" and "cereals", with the biggest values of RCA in 2013, the evolution of RCA between 1990 and 2013 is fluctuant. However their contribution to the total exports of Romania was not so important in 1990 (6.4%) and is still small in 2013, when their total ratio in total exports is low (11.6%).
We have to point out that "cereals" register the highest value of RCA index in 2013 between the ten selected commodities. This value of 5.96 reflects the size of the ratio between the world market share of Romania for this commodity relative to country's aggregate market share. Also this important value means a significant market share of this commodity. In fact "cereals" export is relaunched in the period starting in 2010 until 2013, while their export was not found in 1990.

Data of 2013, concerning specific export values, total exports and revealed comparative advantage shows that the ratio of high processed exported commodities is 40% of exports, while low processed ones represent only 24% of total exports.

6. THE MARKET SHARE OF MAIN ROMANIAN COMMODITIES

Market share (S^{ij}_m) measures the exports of a country in imports of another one for a product "m":

$$S_m^{ij} = X_m^{ij} / M_m^j \quad (2)$$

Where X^{ij}_m are the exports of country i to region j for a product "m", M^i_m are the imports of i for the product "m".

Market shares may usually be studied through time as an indicator of competitiveness by industry or at the country level either bilateral or multilateral. The export growth decomposition or shares for a country sums up the external demand effect and the market share effect.

We studied for the ten commodities analyzed the market share through time for 1990, 1995, 2000, 2005, 2010 and 2013. A graphical representation for Romania's market share through time is done in figure 5 (World Development Indicators, n.d.).

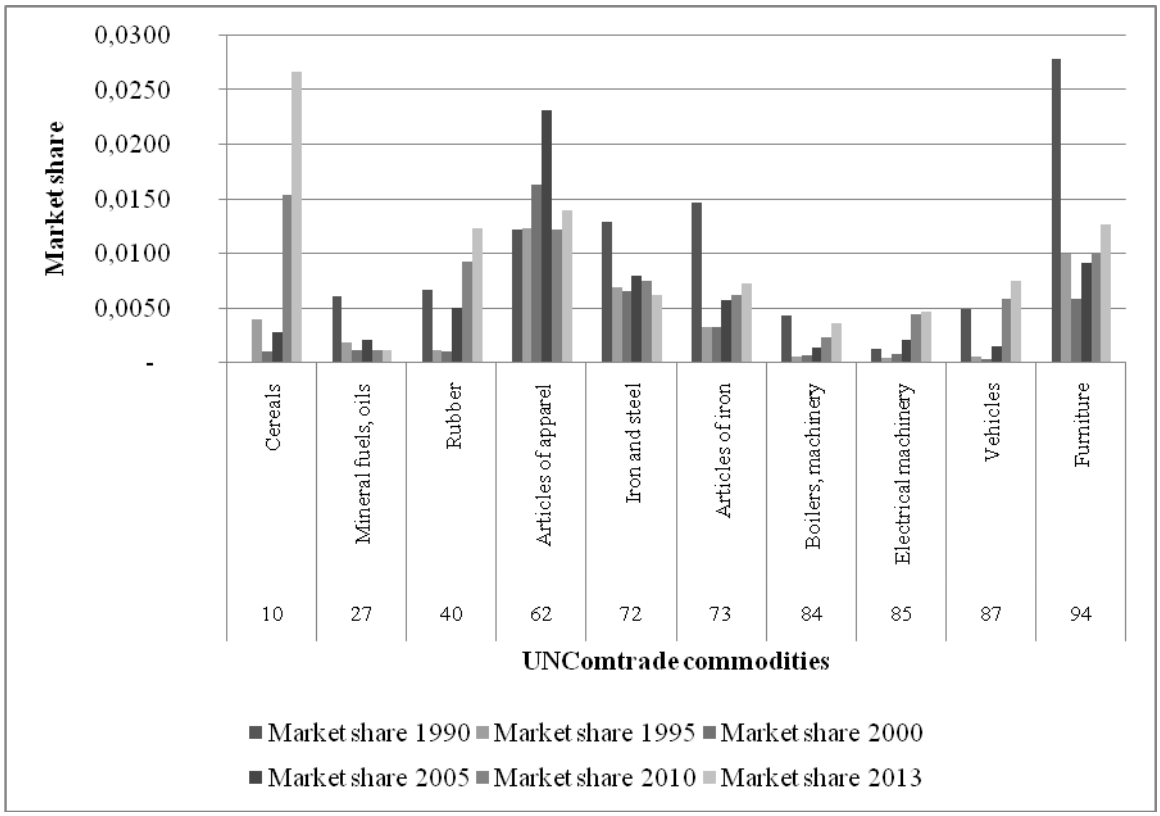

Figure 5. Romania's market share through time

Source: made by authors based on United Nations Commodity Trade Statistics Database

We notice that Romania's market share for low processed materials, such as "mineral fuels, oils" and "iron and steel", decreased continuously from 1990 until 2013. Romania's market share for manufactured and high processed goods, such as "boilers and machinery", "electrical machinery" and „vehicles", generally increased from 1990 until 2013. Thus, Romania seems more industrialized in 2013, when exported goods involve more processing compared to 1990, when low processed export goods were more than 39% of exports. In 2013 low processed export goods represent only 15.7% of total export, so we are facing an important reduction compared to 1990. However, in 2013 the market shares for "cereals" and „furniture" are relaunched.

We observe that the world's market share for the same goods generally decreased from 1990 to 2013, except for "mineral fuels, oils", „furniture" and „articles of apparel" which are oscillating. A special notice for „electrical machinery" whose market share for Romania increased from 1990 to 2013, even if at the word level the market share for this commodity decreased.

7. EXPORTS' GROWTH DECOMPOSITION

Decompositions of export changes could be done through market shares and also through prices. The export growth decomposition for a country sums up the external demand effect and the market share effect:

$$X^{ij}_{t+n} - X^{ij}_{t} = \sum_m S^{ij}_{m,t}(M^{j}_{m,t+n} - M^{j}_{m,t}) + \sum_m (S^{ij}_{m,t+n} - S^{ij}_{m,t}) M^{j}_{m,t+n} \quad (3)$$

Where (M^{j}_{t+n} - M^{j}_{t}) represents the external demand effect for a product "m" and (S_{t+n}^{ij} - S_{t}^{ij}) represents the market share effect for a product "m". Also X^{ij}_{t} are exports of country i to region j at a time t, $M^{j}_{m,t}$ are imports of j for a product "m" at a time t and $S^{ij}_{m,t}$ represents share of country i in imports of j for a product "m" at a time t.

We will try to study the exports' growth decomposition for "vehicles" and „iron and steel", commodities with revealed comparative advantage index bigger than the unit and generally an increasing market share, as we saw previously.

For these commodities we extracted data from Comtrade Database for the period between 1990 and 2013, on a five years step basis, data concerning exports and imports values by subindustries for each commodity and also the traded quantities. Based on this data we computed market shares and prices for each subindustry.

In order to compute the exports' growth decomposition we calculated the external demand effect and the market share effect and we compared the results with the real difference of export for that period based on data from Comtrade Database. Results are below in table 2 for „iron and steel" and in table 3 for „vehicles":

Table 2. Exports' growth decomposition for iron and steel

Iron and steel	1990-1995	1995-2000	2000-2005	2005-2010
External demand effect	1,182.60	-50.80	1,254.26	743.64
Market share effect	-858.62	6.81	234.04	-245.76
Total effect	323.98	-43.99	1,488.30	497.88
Real Comtrade difference	447.8	-104	1490	498

Source: made by authors based on United Nations Commodity Trade Statistics Database

Table 3. Exports' growth decomposition for vehicles

Vehicles	1995-2000	2000-2005	2005-2010	2010-2013
External demand effect	52.32	114.58	263.67	-3,413.07
Market share effect	-66.12	671.09	2,198.00	9,222.11
Total effect	-13.80	785.68	2,461.67	5,809.04
Real Comtrade difference	-702	1,158	4,807	3,100.46

Source: made by authors based on United Nations Commodity Trade Statistics Database

We notice for „iron and steel" results for exports' growth, got by summing the two effects, very close to the real ones based on Comtrade data, especially for the last intervals, as for the first ones some data was missing from the database. Calculated exports' growths are close to the real ones extracted from Comtrade data with error inferior to 0.1% for periods after 2000.

For „iron and steel" between 1990 until 1995 even the external demand has increased, we had a negative market share effect as an ex-communist country and so the total effect was diminished, but still remains positive. From 1995 to 2000 based on the demand reduction the total effect was

negative and exports of iron and steel decreased. For the last two intervals external demand increased significantly from 2000 until 2005 and then diminished between 2005 and 2010, due to the effects of the economic crisis. In these conditions between 2000 and 2005, based also on the positive effect of market share, we had an important increase of exports value for iron and steel; between 2005 and 2010, even if market share effect was negative, we still had a light increase of exports for iron and steel based on positive external demand effect.

For „vehicles" results for exports' growth are more different as real ones because some data was missing from the database. For the same reason we were unable to compute exports' growth decomposition between 1990-1995 and so we included a last three year period from 2010 until 2013. Concerning the whole period 1995-2013 the external demand effect is not so important for vehicles as the market share effect, which is determinant for exports' growth. So, we got increasing exports from 1995 until 2010 and a light decrease between 2010 until 2013, as indicated also by data from UN Comtrade database.

Concerning prices the exports' growth decomposition or value for a country totalizes the quantitative effect and the price effect according to the formula:

$$X^{ij}_{t+n} - X^{ij}_{t} = \sum_m P^{ij}_{m,t}(Q^{ij}_{m,t+n} - Q^{ij}_{m,t}) + \sum_m (P^{ij}_{m,t+n} - P^{ij}_{m,t})Q^{ij}_{m,t+n} \quad (4)$$

Where (Q_{t+n}^{ij} - Q_t^{ij}) represents the quantity effect for a product "m" and (P_{t+n}^{ij} - P_t^{ij}) represents the price effect for a product "m". Also X^{ij}_t are exports of country i to region j at a time t, $Q^{ij}_{m,t}$ are quantities exported from i to j, for a product "m" at a time t and $P^{ij}_{m,t}$ represents prices of country i in imports of j, for a product "m" at a time t.

We studied the exports' growth decomposition for the same two commodities, using data extracted from Comtrade database for each subindustry and related to the same years as we did previously for shares.

Results for exports' growth decomposition are presented below in table 4 for „iron and steel" and in table 5 for „vehicles":

Table 4. Exports' growth decomposition for iron and steel

Iron and steel	1990-1995	1995-2000	2000-2005	2005-2010
Quantity effect	303.82	230.44	261.58	-323.24
Price effect	20.09	-274.43	1,226.72	821.12
Total effect	323.91	- 43.99	1,488.30	497.88
Real Comtrade difference	447.8	-104	1,490	498

Source: made by authors based on United Nations Commodity Trade Statistics Database

Table 5. Exports' growth decomposition for vehicles

Vehicles	1995-2000	2000-2005	2005-2010	2010-2013
Quantity effect	-31.77	816.93	2,370.51	1,476.90
Price effect	17.97	-31.25	91.15	4,332.13
Total effect	- 13.80	785.68	2,461.67	5,809.04
Real Comtrade difference	-702	1,158	4,807	3,100.46

Source: made by authors based on United Nations Commodity Trade Statistics Database

For "iron and steel" results for exports' growth are close to the real ones extracted from Comtrade data, especially for the last intervals. So, for 2000-2005 and 2005-2010 the difference is less than 0.1%. For „iron and steel" exports' growth the quantity effect matters only for the first interval (1990-1995), while price effect is determinant especially for the periods betwen 2000-2005 and 2005-2010. Also, by checking the associated prices for these periods we may clearly notice the price increase for all subindustries of iron and steel from 2000 to 2005 and 2010.

For „vehicles" instead between 1995 and 2010 the price effect, with fluctuant values from a year to another, is not so important compared with the quantity effect. Instead, from 2010 until 2013, the price effect is determinant in total effect. Except for the first period (1995-2000) we get a positive total effect for all other periods.

In conclusion, for „iron and steel" for the whole analyzed period price effect was determinant for exports' growth, while for „vehicles" quantity increase was determinant for exports' growth between 1995 until 2010 and price increase effect was determinant between 2010 until 2013.

8. CONCLUSIONS

During the analyzed period between 1990 until 2013 in Romania GDP, imports and exports graphics are similar and their evolution seems connected. However exports' growth is faster than GDP's growth, except 2008, under the beginning of the economic crisis and also 2012; exports' growth appears as a necessary condition for GDP's growth, but not a sufficient one. In 2008 GDP is reaching its maximum for the whole period and in 2013 GDP is only 8.7% less, second biggest value reached. According to data reported by the World Bank, in 2013 exports reached a new record level from 1990 until now, with a value of $79.6 billion, while imports' value was similar with the values in 2011 and 2012 and below the peak of 2008. This growth was sustained by an increase of deliveries towards the European Union countries which account for 70% of Romania's exports. Based on exports' growth, GDP reached in 2013 a value of $186.6 billion, only with 7.1% below the highest value of 2008. GDP's annual growth in 2013 was of 3.5%.

The revealed comparative advantage for a commodity is a factor that leads to the increase in time of the market share. Thus, if exports are increasing also their contribution to the GDP is higher and finally GDP increases also. So, analyzing the revealed comparative advantage for goods placed on top exported commodities in 2013 we found significant values of RCA index much bigger than 1 and also a relevant market share. Data of 2013 shows that all high processed exported commodities made up for 40% of exports compared to 25% in 1990. In 2013 low processed export goods represent 24% of total exports compared to 40% in 1990, meaning a significant reduction. Romania's market share for low processed materials generally decreased from 1990 until 2013, while its market share for manufactured and high processed goods generally increased in the same period.

Concerning the influence on exports' growth of quantity and price we noticed for all commodities a general increase of export prices leading to export growth. However price effect and/or quantity effect could be prevalent for certain commodities in certain periods, according to specific market conditions, both leading if increasing to export growth. Same statement is also valid for external demand effect versus market share effect.

Taking into account that for the whole period 1990-2013 exports' growth is generally superior to GDP's growth, we identified the top export industries (i.e. "electrical machinery", "boilers and machinery" and "vehicles") which are growing faster than the others. Following the analysis done we found that in Romania the growing export sectors are integrated in European trade and also we can observe changes in the mentioned largest export sectors in order to improve European integration.

Regarding Romania's place in the chain of value we find final goods for many export industries, but also intermediary goods are produced by other industries. Thus, among the final goods there are high processed commodities, involving more industrial manufacture, such as "electrical machinery", "boilers" and "vehicles" and low processed commodities such as "articles of apparel" or "furniture". Romania is also exporting some intermediary goods such as "mineral fuels, oils", "iron and steel" or "cereals". Romania's exports are generally directed towards industrialized countries, such as the EU countries, USA and China, but also towards developing countries.

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