SOME CHARACTERISTICS OF ROMANIA'S EXTERNAL TRADE IN THE PERIOD 1990-2014

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Abstract: *This paper investigate the evolution of the Romania's exports and imports in the period 1990-2014, having in mind the relationship between external trade and sustainability of the national economy. The issue of the economic growth is addressed, considering different steps taken by Romania since the year 1990, corroborated with those of the global financial crisis which broke out in 2008. The global financial crisis, which started at the end of the year 2008, had a negative impact on exports and imports of Romania. One of the reason of this negative impact is related to the fact that Romania's economy is heavily dependent on the other EU Member States economic evolution, which is vulnerability. This strong dependence is illustrated by the high scale of the crisis impact on Romania's GDP and on the external trade flows. The relationship between these macro-indicators is very important and it is dependent on the export resilience to the external shocks. Exports and imports increased over the whole period analyzed, so that today we can say that openness of Romanian economy is relatively high, which implies not only opportunities for external trade, but also concerns for increasing resilience of the national economy to the possible external shocks and vulnerabilities. Export resilience of Romania as well as of its county's was analysed in this study. The main conclusion of the paper reveals that the evolution of external trade at global level failed to counteract the negative effects of the economic crisis in Romania and did not contribute to its sustainability and convergence. The GDP decline in 2009 and 2010 has been recovered only partially by 2014 even if exports and imports exceeded the maximum level before the crisis. As regard the territorial level, the export resilience is not favourable for those counties who focused theirs exports on primary products, products based on natural resources and low-technology products. This kind of exports lead to the decrease of the gains from external exchange and implicitly to a low potential of endogenous growth at the county level, mainly due to deteriorating terms of trade.*

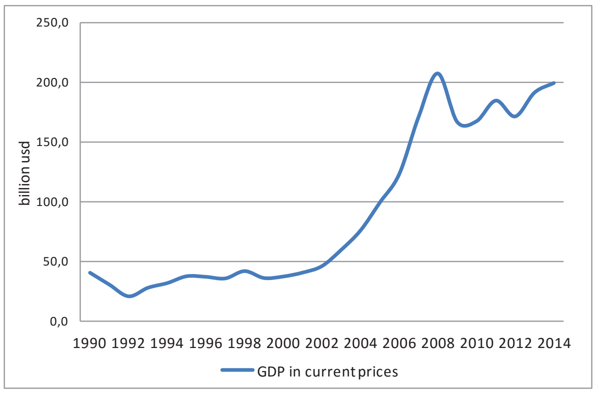
Keywords: *export, import, trade balance, resilience, regional distribution of external trade, concentration and diversification indices*

JEL classification: *D40; F10; F15*

1. Exports, imports and economic growth

A quarter century after the change of the political regime, in 2014 Romania was about to resume the economic growth reached in 2008, with the recovery of a large proportion of the decline in the years 2009-2010.

Figure 1 Evolution of Romania's GDP in the period 1990-2014



Data source: UNCTAD (http://unctadstat.unctad.org/wds/TableViewer/tableView.aspx?ReportId=96, January 2016)

In Romania, the evolution of economy was different throughout the four periods of post-revolutionary history on the way to obtain the status of a Member State of the European Union (1990-1994 - the pre-association period; 1995-1999 - the association period; 2000-2006 - pre-accession period; after 2007 – the post-accession period).
The first two periods were marked by severe economic decline recorded between the years 1990-1993 and 1997-1999. Only since 2001, the GDP began to grow beyond the level of 1990.
In these two periods, the share of Romania's GDP in the EU's GDP was about 0.4%, increasing slightly to 0.6% in the pre-accession period. In the period 2007-2014 the share of Romania's GDP in the EU's GDP was around 1%, as average.

Table 1 GDP, export and import of goods and services of Romania and EU, 1990-2014

		EU pre-asociation period	EU asociation period	EU pre-accesion period	EU post-accesion period
		1990-1995	1996-2000	2001-2006	2007-2014
billion USD, current prices					
Romania (RO)	GDP	189.6	188.6	446.2	1464.8
	Export of goods and services	39.4	51.7	149.9	500.4
	Import of goods and services	49.3	63.9	191.7	593.5
European Union (EU)	GDP	49452.0	46681.9	73729.3	142695.5
	Export of goods and services	12735.0	14401.4	25587.0	57228.6
	Import of goods and services	12491.7	13838.0	24894.9	55160.4
share of RO GDP in EU GDP (%)		0.4	0.4	0.6	1.0
Romania (RO)	share of export of goods and services in GDP (%)	20.8	27.4	33.6	34.2
	share of import of goods and services in GDP (%)	26.0	33.9	43.0	40.5
European Union (EU)	share of export of goods and services in GDP (%)	25.8	30.9	34.7	40.1
	share of import of goods and services in GDP (%)	25.3	29.6	33.8	38.7

Data source: own calculations based on UNCTAD data (http://unctad.org/en/Pages/Statistics.aspx)

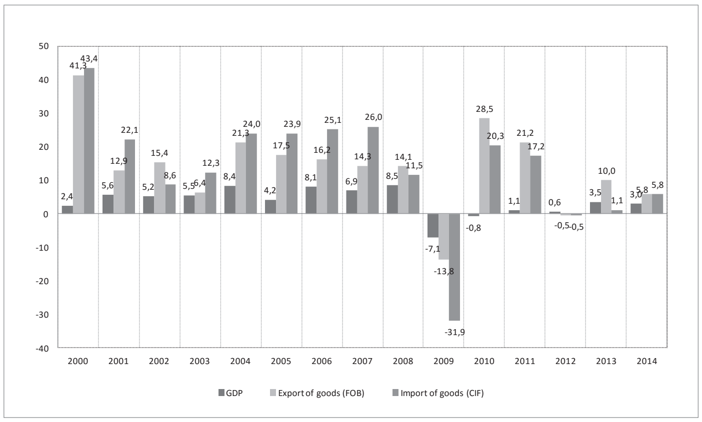
The goods and services exports and imports shares in GDP has been increasing over the first three periods analysed - from 20.8% in the pre-association period to 33.6% in the pre-accession period for exports and respectively from 26% to 43% for imports.

In the post-accession period, the exports share in GDP has continued to grow - to about 34.2% on average in the period 2007-2014 while the share of imports in GDP has declined during this period, with an average of 2.5 pp (from 43% to 40.5%).

The share of export in Romania's GDP is lower than the share of export in EU's GDP (34.2% versus 40.1%, in the post-accession period). On the contrary, the share of imports in the Romania's GDP is higher than in the case of EU (40.5% versus 38.7%, in the post-accession period), as can be seen from Table 1 above.

Generally, the exports of goods and services sustained the development of Romanian economy, being a positive correlation between their trends and the GDP evolution. But although they were an important driver for GDP, exports did not have enough strength to haul the economy, especially in periods in which it was dipped into recession.

Figure 2 - Evolution of the annual growth rate in the case of the GDP and external trade of goods (%)



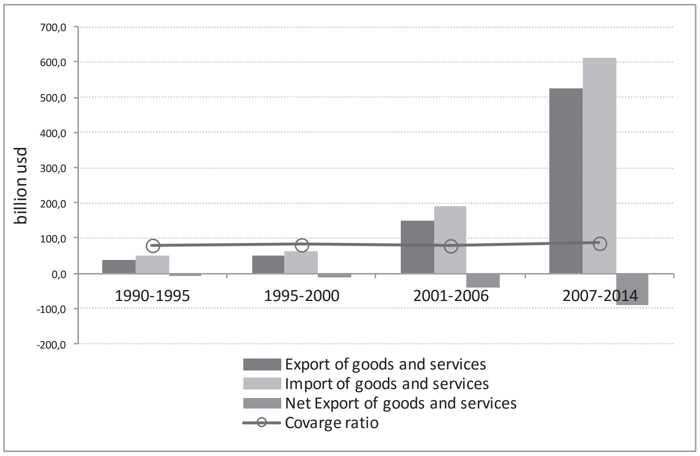
Data source: own calculation based on data of Romanian National Institute of Statistics (www.insse.ro) and National Bank of Romania (www.bnro.ro)

The potential of Romanian exports is limited considering their dependence by the economic evolution of other EU Member States, main trading partners of Romania and, also, their low contribution in GDP in comparison with contribution of domestic consumption.

2. Net export and export/import coverage ratio

Limited impact of exports in GDP is linked to the fact that not only exports in absolute terms are considered in quantifying the contribution to GDP, but the net exports. So, the imports dynamics is also very important.
Usually, higher exports involve also imports increase, which limit the net contribution of external trade to economic growth. This is due to the fact that, unfortunately, the Romanian exports do not include enough value added yet, although the trend is positive from this point of view.

Figure 3 Net export and export/import covarage ratio in Romania, 1990-2014



Data source: own calculation based on data of Romanian National Institute of Statistics (www.insse.ro), National Bank of Romania (www.bnro.ro) and UNCTAD (http://unctad.org/en/Pages/Statistics.aspx)

Exports and imports have increase over the four periods analysed. If in 1990, at the beginning of pre-association period, exports of goods and services were approximately 6.4 billion USD by the end of 2014 they increased by about 12.8 times, exceeding 82 billion USD.
Imports of goods and services have increased by about 8.4 times in 2014 compared to 1990. Although the growth of exports is higher than of imports, the volume of imports is greater than exports in 2014 compared to 1990, the net balance having an ascending trend along the periods analysed.
As a result, the coverage of imports by exports was not favorable to the economy. Although the average coverage of imports by exports exceeded 85% in the post-accession period (2007-2014), indicating a slight improvement in the trade balance compared to previous periods (which was under 80%), the level still indicate that in the case of Romania, the export activity does not compensate for imports. Thus, the export potential of the economy is quite limited and even with an increase in GDP, the trade deficit will not be reduced, Romania remaining largely dependent on imports.
Improving relative coverage especially after EU accession (2007) is seen as a positive factor, some economists taken into account this indicator in the trade efficiency calculation (Albu et al, 2013)
Exports are highly dependent on imports, especially in relation to EU's Member States, as will be seen further on. This seems to be a consequence of the current structure of the Romanian economy, which, as already said before, although is able to record an increase in real terms, not significantly reduce the trade deficit.
Romania's economy is heavily dependent on the Eurozone, which is vulnerability. However, in recent years, it has been observed further increase of the

geographical diversification degree by increasing the exports to non-EU countries. As seen from the data presented in the Table 2, the average share of exports to the EU increased from 48.5% in 1990-1995 to 73.7% in the accession period 2001-2006, followed by a diminishing of the share to 71.4% during 2007-2014 (after Romania's accession to EU). Unlike exports, the share of imports from the EU increased continuously from 46.5% in 1990-1995 to 73.1% in the post-accession period.

So, the high degree of Romania's dependence by the European Union (over 70%) should be considered when it comes to diversifying national exports.

Table 2 Share of Intra-EU and Extra-EU exports/imports in total exports/imports of Romania, 1990 - 2014

share in total export/import (%)		Export		Import	
		Intra-EU28	Extra EU28	Intra-EU28	Extra EU28
EU pre-association period	**1990-1995**	48.5	51.5	46.5	53.5
EU association period	**1996-2000**	67.9	32.1	65.8	34.2
EU pre-accession period	**2001-2006**	73.7	26.3	66.4	33.6
EU post-accession period	**2007-2014**	71.4	28.6	73.1	26.9

Data source: own calculation based on data of Romanian National Institute of Statistics (www.insse.ro)

Trade balance shows the interface of the national economy of a country with the external environment. In fact, a country exports in order to obtain currency needed for import, which is essential for its economic and social development.

As shown in Table 3, throughout the whole period of transition to a market economy, Romania had a negative trade balance, with an increasing trend in the medium and long term, which highlights the ongoing weakness of the chronicity of the trade deficit.

Table 3 Trade balance sold for Intra-EU and Extra-EU, 1990 – 2014 (Romania)

		Trade balance sold (FOB-CIF)		Average trade balance sold (FOB-CIF)	
		billion USD			
		Intra-EU28	Extra EU28	Intra-EU28	Extra EU28
EU pre-association period	**1990-1995**	-4.4	-5.7	-0.7	-1.0
EU association period	**1996-2000**	-7.5	-7.7	-1.5	-1.5
EU pre-accession period	**2001-2006**	-26.8	-46.0	-4.5	-7.7
EU post-accession period	**2007-2014**	-104.9	-83.8	-13.1	-10.5

Data source: own calculation based on data of Romanian National Institute of Statistics (www.insse.ro)

Thus, the negative average trade balance of Romania increased approximately 3-times in the post accession period against the pre-accession period. This deterioration is explained by the reduced competitiveness of Romanian exports to the EU market and the impact of financial crisis which diminished the export demand Romania's partner Member States.

3. Openness of Romania against EU and some partner Member States

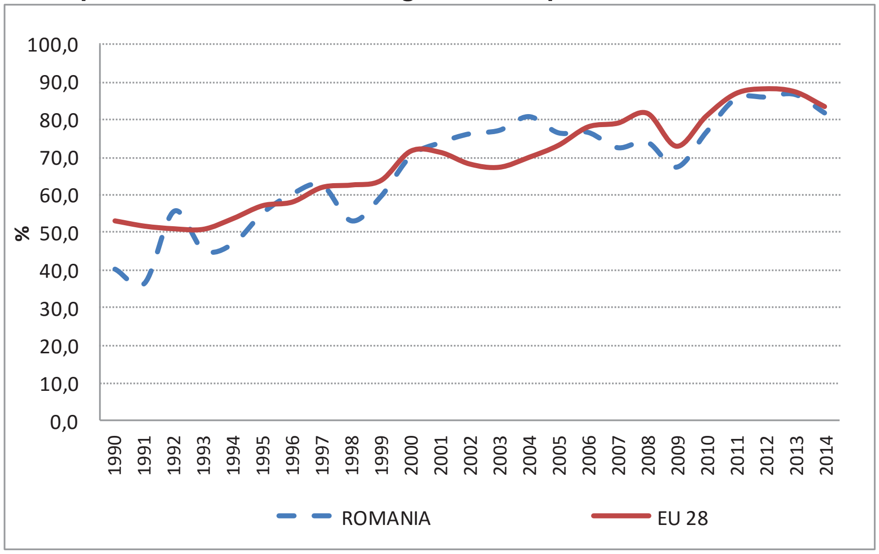
One of the advantages of the EU accession is given by increasing the openness to the world economy, with beneficial effects on foreign direct investment flows, bilateral flows of labor force, labor productivity etc.

If the openness of the economy is high, the country is more integrated into the international community and, therefore, more dependent on external markets. In some industrialized countries, that have a large domestic market, able to absorb much of the production, the openness of the economy is not very high. On the other hand, the openness of the developed countries, with small territorial size, is very high due to a lack of domestic markets in relation to production capacity.

Openness of the Romanian economy - with a steady ascending trend in recent years - has increased significantly, from 40.2% in 1990 to 81.6% in 2014, due to the decrease of tariff protectionism and the intensification of the process of the integration in the world economy.

Considering the annual evolution of this indicator in the period 1990-2014, the maximum level was reached in 2013 (86.5%). In 2014 the degree of openness of the Romanian economy shrank by about 5 percentage points compared to 2013. The same downward trend was recorded at EU level, in 2014 the degree of openness being 83.3%, 4 percentage points below the level recorded in 2013 (87.3%).

Figure 4 Openness of Romania as against European Union, 1990 - 2014



Data source: own calculation based on data of Romanian National Institute of Statistics (www.insse.ro) and UNCTAD (http://unctad.org/en/Pages/Statistics.aspx)

Evolution of the average degree of the economy openness during the 4 historical periods after 1989 show a steady increase, more accentuated in the first three periods, i.e. between 1990 and 2006.

The openness of Romania during the current accession period is over 32 pp higher than the pre-association period (from 46.5% to 78.7%), while the increase as against to the pre-accession period is only 2 pp (from 76.7% to 78.7%).

Table 4 Openness of Romania as against some partner EU Member States, 1990 - 2014

%	EU pre-association period	EU association period	EU pre-accession period	EU post-accession period
	1990-1995	**1996-2000**	**2001-2006**	**2007-2014**
Bulgaria	101.9	111.1	118.8	130.3
Czech Republic	96.6	108.4	126.2	139.7
France	43.1	49.6	52.7	58.2
Germany	48.4	56.4	73.0	90.5
Greece	32.9	40.6	49.6	53.4
Hungary	67.8	119.2	137.6	169.1
Italy	40.5	48.5	51.3	56.3
Poland	44.8	54.9	70.3	88.3
ROMANIA	46.5	61.0	76.7	78.7
EU 28	52.8	63.5	71.2	82.4

Data source: own calculation based on data of Romanian National Institute of Statistics (www.insse.ro) and UNCTAD (http://unctad.org/en/Pages/Statistics.aspx)

As against other EU Member States and main trading partners, the openness of Romania in the current post-accession period (2007-2014) is significantly lower (especially compared with Hungary, Bulgaria, Czech Republic, Germany, and Poland). On the other hand, Romania has, on average, a higher openness compared with France and Italy, the top trading partners in the period 2007-2014.

4. Export's technological structure and performance

Export performance varies significantly from country to country, with different evolutions in dynamics. Technological structure of exports represents an indicator of their quality.

Export success is more and more linked to the ability to attract foreign direct investments. Given the increasing globalization (with occurrence of integrated production systems that link together several countries) and the role of multinational companies in trade and innovation, it is important for countries to provide not just more foreign investment, but also a better quality of thereof.

Most theories of trade assume that technological activity hasn't a role in a country's comparative advantage and that the main determinants are relative endowments of production factors. Developing countries are believed to be followers of technologies, importing and users of innovations from developed countries.

The relatively weak competitiveness of Romanian external trade is determined by the low level of diversification of exports during the pre-accession period and the low volume of high-tech exports and imports. Goods incorporating low and medium technologies have the biggest share in Romanian exports.

There are many ways to break down exported and imported goods by the types of technologies used for their producing. In what follows, a 1994 OECD classification - based on technological activity within each product category was used.

Table 5 Share of exports by tehnologies, in total Romania's exports of goods

Share of exports of goods by technologies (%)		EU association period 1996-2000	EU pre-accession period 2001-2006	EU post-accession period 2007-2014	Coverage of clasification by tehnologies
PP	Primary products	7.8	5.7	8.0	Fresh fruit, meat, rice, cocoa, tea, coffee, wood, coal, crude petroleum, gas
RB	Resource based manufactures	18.7	18.6	18.0	Prepared meats/fruits, beverages, wood products, vegetable oils, ore concentrates, petroleum/rubber products, cement, cut gems, glass
LT	Low technology manufactures	49.1	44.4	23.5	Textile fabrics, clothing, headgear, footwear, leather manufactures, travel goods, pottery, simple metal parts/structures, furniture, jewellery, toys, plastic products
MT	Medium technology manufactures	19.8	24.9	38.3	Passenger vehicles and parts, commercial vehicles, motorcycles and parts, synthetic fibres, chemicals and paints, fertilisers, plastics, iron, pipes/tubes, engines, motors, industrial machinery, pumps, switchgear, ships, watches
HT	High technology manufactures	4.0	5.9	9.9	Office/data processing/telecommunications equip, TVs, transistors, turbines, power generating equipment, pharmaceuticals, aerospace, optical/measuring instruments, cameras

Note: this classification does not cover electricity, cinema film, printed matter, "special" transactions, gold, art, coins, and pets

Data source: own calculations based on UNCTAD (http://unctad.org/en/Pages/Statistics.aspx). Lall's classification available at OECD was used for data aggregation on the types of technologies.

If we look at periods of pre-association, accession and accession to European Union, we find that the share of primary products is declining, from 23.6% in the period 1996-2000 to 18.9% during the period 2007-2014. A similar trend is observed for products based on natural resources and low technology products. Even in the case of medium-tech products, which have the largest share in exports, a descending trend during the period 2007-2014 could be observed as compared to the period 2001-2006.

High share of high-tech products in the exports of a country is the best indication that country has an increased level of competitiveness. As regards Romania's exports of high-tech products, there is an ascending trend from year to year if we consider groups for years 1996-2000, 2001-2006 and 2007-2014.

However, if we consider the annual change in the exports share of high-tech products in Romania, their trend is slightly decreasing since 2011, being explained rather by the impact of temporary factors, but also by reducing expenditures on research, development and innovation (RDI) in recent years. In absolute terms, exports of high-tech products increased by 4.2 pp in 2014 as against to 2013.

As regards imports, the largest share belongs to the medium technology products (46.1%), being followed by low technology products (25.6%), primary products and natural resource-based (each about 19%). The share of high-tech products is increasing at 20.3% on average in the post-accession period as against to 16.5%

in the pre-association period. At the annual level, however, the share of imports of high-tech products is declining (about 17% in 2014, the lowest level in the last 10 years) as well as their dynamics as 99.3% in 2014 against to 2013.

Table 6 Share of imports by tehnologies, in total Romania's imports of goods

Share of imports of goods by technologies (%)		EU association period 1996-2000	EU pre-accession period 2001-2006	EU post-accession period 2007-2014	Coverage of clasification by tehnologies
PP	Primary products	23.6	21.3	18.9	Fresh fruit, meat, rice, cocoa, tea, coffee, wood, coal, crude petroleum, gas
RB	Resource based manufactures	19.5	19.0	18.7	Prepared meats/fruits, beverages, wood products, vegetable oils, ore concentrates, petroleum/rubber products, cement, cut gems, glass
LT	Low technology manufactures	29.2	33.2	25.6	Textile fabrics, clothing, headgear, footwear, leather manufactures, travel goods, pottery, simple metal parts/structures, furniture, jewellery, toys, plastic products
MT	Medium technology manufactures	42.6	48.6	46.1	Passenger vehicles and parts, commercial vehicles, motorcycles and parts, synthetic fibres, chemicals and paints, fertilisers, plastics, iron, pipes/tubes, engines, motors, industrial machinery, pumps, switchgear, ships, watches
HT	High technology manufactures	16.5	18.4	20.3	Office/data processing/telecommunications equip, TVs, transistors, turbines, power generating equipment, pharmaceuticals, aerospace, optical/measuring instruments, cameras

Note: this classification does not cover electricity, cinema film, printed matter, "special" transactions, gold, art, coins, and pets

Data source: own calculations based on UNCTAD (http://unctad.org/en/Pages/Statistics.aspx). Lall's classification available at OECD was used for data aggregation on the types of technologies.

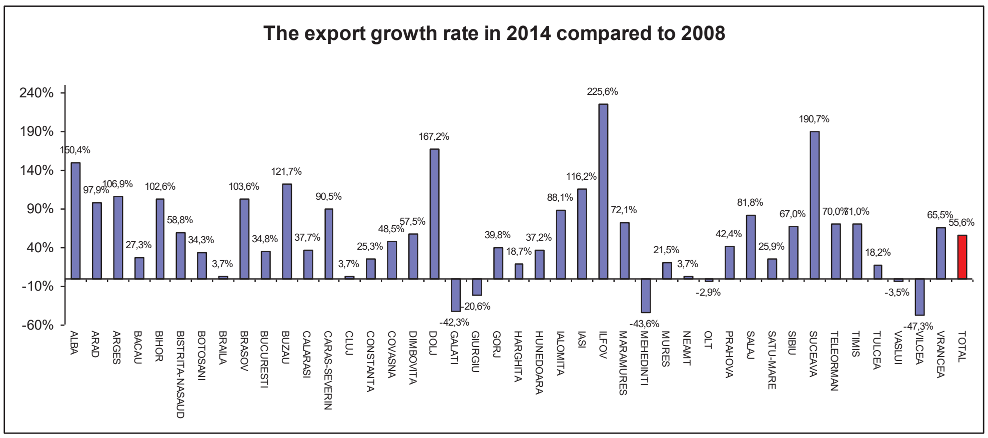
In the developed EU Member States and implicitly at Community level, the share of high-tech exports is higher than in Romania. In 2014, the largest shares are registered by Ireland, France, the Netherlands and the UK. Basically, the gap between Romania and the developed countries is due to the lack of interest from the Romanian private sector side to finance RDI expenditures whereas up to 90% of the high-tech sector is controlled by the foreign companies (branches and subsidiaries of multinational corporations) who supplied the necessary RDI results, in Romania research centers of such companies being non-existent or very rare.

5. The evolution of external trade at county level

5.1 The export growth rate in the period 2009-2014 compared to 2008

The export growth rate in the period 2009-2014 compared to 2008, at the county level, had different values from one county to another. Thus, the counties of Arges, Buzau, Calarasi, Gorj, Ilfov, Suceava and Tulcea have shown a strong resilience on export, export growth continued in the period after the crisis. An atypical county is Cluj, which after the crisis recorded high growth rate on exports (+ 121.7% in 2011 compared to 2008), in 2012 registering a high decrease of export (- 16.7% compared to 2008), mainly because of cessation activity of a major producer and exporter of mobile phones. Another atypical county is Giurgiu, which after the crisis recorded positive rates of exports (+33.2% in 2011 compared to 2008), in 2013 registering a high decrease on exports (inconstant resilience).

Figure 5 - The export growth rate in 2014 compared to 2008



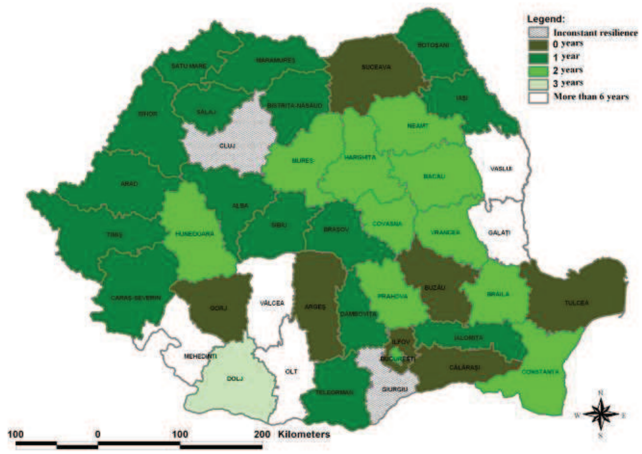
Counties such as Alba, Arad, Bihor, Bistrita-Nasaud, Botosani, Brasov, Caras-Severin, Dambovita, Ialomita, Iasi, Maramures, Salaj, Satu-Mare, Sibiu, Teleorman and Timis had a relatively good resilience export; thus in 2010 the export exceeded the 2008 level for these counties. Instead, for the counties Bacau, Braila, Bucharest, Constanta, Covasna, Harghita, Hunedoara, Mures, Neamt, Prahova and Vrancea the export exceeded the 2008 level only in 2011. The Dolj county returned to pre-crisis export value only in 2012, with the launch exports of a large car manufacturer.

Table 7 – Export resilience (Recovery time in years)

Recovery time	0 years	One year	Two years	Three years	More than six years	Inconstant resilience
No. of counties	7	16	11	1	5	2
Weights in 2008	12.3	34.0	37.8	1.3	10.7	3.2
Weights in 2014	17.3	39.7	32.0	2.2	5.0	2.1
Counties	Argeş, Buzău, Călăraşi, Gorj, Ilfov, Suceava and Tulcea	Alba, Arad, Bihor, Bistriţa-Năsăud, Botoşani, Braşov, Caraş-Severin, Dâmboviţa, Ialomiţa, Iaşi, Maramureş, Sălaj, Satu-Mare, Sibiu, Teleorman and Timiş	Bacău, Brăila, Bucureşti, Constanţa, Covasna, Harghita, Hunedoara, Mureş, Neamţ, Prahova and Vrancea	Dolj	Galaţi, Mehedinţi, Olt, Vaslui and Vâlcea	Cluj and Giurgiu

There are still 5 counties which did not return to the values of pre-crisis exports: Galati (2014 compared to 2008 -42.3%), Mehedinti (2014 compared to 2008 -43.6%), Olt (2014 compared to 2008 -2.9%), Vaslui (-3.5% in 2014 compared to 2008) and Valcea (-47.3% in 2014 compared to 2008).

Figure 6 – The export resilience at the county level



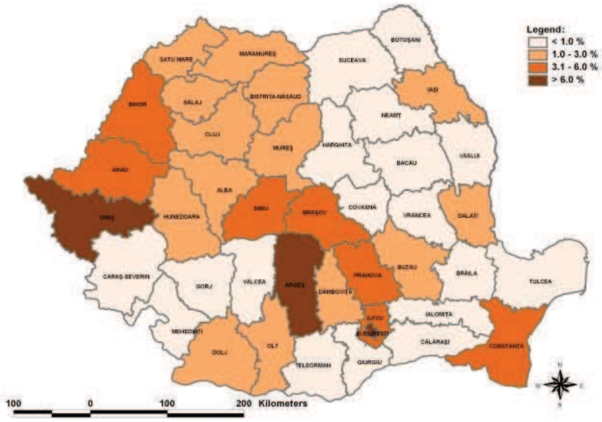
The share of export for top 10 counties in total exports increased in 2014 compared to 2008 from 64.6% in 2008 to 66.2% in 2014. The highest increases in weights (in percentage points pp) had recorded the following counties: Arges +2.4 pp (climbed from position 3 to position 2 in the top) and Ilfov +2.1 pp (climbed from position 14 to position 8 in the top). The biggest rise in the top recorded county Suceava, which has climbed 11 places from position 37 to position 26 in the top. The biggest drop in top was recorded for county Valcea, which lost 14 places, from position 17 in 2008 to position 31 in 2014 (-1.2 pp). The largest decreases of the weights (in percentage points pp) were recorded by the following counties: Galati -2.6 pp (form position 6 in 2008 to position 17 in 2014) and Bucharest that, though it kept its leading position on export, registered a large decrease of the weight in total export (-2.5 pp).

Table 8 - Top 10 counties on export in 2008 and 2014

2008			2014		
No.	**County**	**Weight**	**No.**	**County**	**Weight**
1	Bucureşti	18.9	**1**	Bucureşti	16.4
2	Timiş	8.4	**2**	Argeş	9.7
3	Argeş	7.3	**3**	Timiş	9.2
4	Constanţa	6.2	**4**	Arad	5.5
5	Arad	4.3	**5**	Constanţa	5.0
6	Galaţi	4.1	**6**	Braşov	4.7
7	Prahova	4.1	**7**	Sibiu	4.1
8	Sibiu	3.9	**8**	Ilfov	4.1
9	Olt	3.8	**9**	Prahova	3.7
10	Braşov	3.6	**10**	Bihor	3.7

Counties like Galati and Olt came out of top 10 in 2014 compared to 2008, giving way to the top 10, in 2014, to Ilfov and Bihor counties.

Figure 7 – The export weights of the counties in 2014



The share of top 10 exporting companies at county level in 2014 exceeded, in most cases, 50% of total exports at the county level, which indicates a strong dependency of exports at the county level by a few big exporting companies.

Table 9 – The weight of top 10 exporting companies at county level in 2014

	The weight of top 10 exporting companies at county level between:						
	30 – 40 %	**40 – 50 %**	**50 – 60 %**	**60 – 70 %**	**70 – 80 %**	**80 – 90 %**	**> 90 %**
No. of counties	1	2	8	3	12	12	4
Counties	Cluj	Harghita Bucureşti	Satu-Mare Timiş Braşov Sibiu Arad Mureş Bihor Băcău	Maramureş Vrancea Ilfov	Vâlcea Suceava Botoşani Brăila Alba Covasna Prahova Iaşi Bistriţa-Năsăud Hunedoara Neamţ Buzău	Dolj Argeş Ialomiţa Constanţa Tulcea Caraş-Severin Calaraşi Sălaj Giurgiu Dâmboviţa Gorj Vaslui	Olt Mehedinţi Teleorman Galaţi

The main export partners

While in 2008 the main export destination was Italy for 21 counties, in 2014 only 15 counties still had Italy on a first position on export. Instead, Germany exceeded Italy in 2014 compared to 2008 and has become the main destination for 16 counties on exports in 2014, compared to only 12 counties in 2008. This shows an increase of exports dependence, on county level, of demand in the German market. Other partner countries on a first position on county export in 2014 are: Bulgaria (2 counties), United Kingdom (one county), South Korea (one county), Norway (2 counties), Poland (one county), Russia (one county), Turkey (2 counties) and US (one county).

Table 10 – The weights of a top 10 partner countries on export in 2014, at the county level

	The weights of a top 10 partner countries on export in 2014, at the county level, between:			
	60 – 70 %	**70 – 80 %**	**80 – 90 %**	**> 90 %**
Number of counties	5	13	19	5
Counties	Dâmboviţa, Prahova, Suceava, Vâlcea, Bucureşti	Alba, Argeş, Buzău, Cluj, Constanţa, Galaţi, Iaşi, Ilfov, Mureş, Neamţ, Olt, Călăraşi, Giurgiu	Arad, Bacău, Bihor, Bistriţa-Năsăud, Botoşani, Braşov, Brăila, Dolj, Gorj, Harghita, Hunedoara, Ialomiţa, Maramureş, Satu-Mare, Sălaj, Teleorman, Timiş, Vaslui, Vrancea	Caraş-Severin, Covasna, Mehedinţi, Sibiu, Tulcea

In 2014 Italy was in the top 10 export destination for 41 counties, Germany for 39 counties and UK for 32 counties.

Table 11 – Partner countries in top 10 export destination of counties

Number of counties	**Over 20 counties**	**Between 10 and 20 counties**	**Under 10 counties**
Partner countries in top 10	IT, DE, FR, GB, HU şi TR	BG, NL, ES, PL, AT, BE şi CZ	US, CN, SE, SK, UA, MD, EG, GR, RU, JO, XS, AE, CH, IL, LY, NO, SM, BR, JP, LB, MX, CA, DZ, EC, FI, GE, IN, KR, KZ, MA, MK, PT, SA, SI, SY, UG şi ZA

Figure 8 – Weights of top 10 partner countries on counties exports in 2014

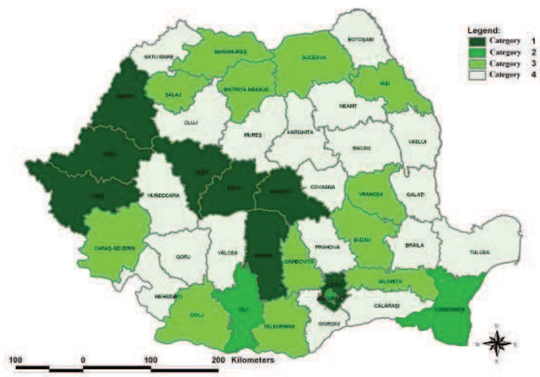
5.2 Exports per capita

Depending on the export per capita in 2014 and export dynamics in 2014 compared to 2008, counties are divided into 4 categories:

- **Category 1**: counties with export per capita higher than the national average and export dynamics in 2014 compared to 2008 higher than the national growth rate
- **Category 2**: counties with export per capita higher than the national average and export dynamics in 2014 compared to 2008 less than the

national growth rate
- **Category 3**: counties with export per capita less than the national average and export dynamics in 2014 compared to 2008 higher than the national growth rate
- **Category 4**: counties with export per capita less than the national average and export dynamics in 2014 compared to 2008 less than the national growth rate

Figure 9 – Counties by categories, previous defined



Based on these criteria resulted in the following:
- in the first category there are 8 counties, with a total export share increasing from 33.7% in 2008 to 43.5% in 2014; dynamics of export per capita in 2014 compared to 2008 are: Alba +177.9%, Arad +111.5%, Arges +120.8%, Bihor +109.8%, Brasov +120.5%, Ilfov +132.2%, Sibiu + 76.6% and Timis + 66.1%.
- in the second category there are 3 counties, with a total export share dropping from 28.9% in 2008 to 23.8% in 2014; dynamics of export per capita in 2014 compared to 2008 are Bucharest +40.5%, Constanta +31.8% and Olt +8.5%.
- in the third category there are 12 counties, with a share of total exports slightly up from 10.0% in 2008 to 12.7% in 2014; dynamics of export per capita in 2014 compared to 2008 are: Bistrita-Năsăud +77.3%, Buzau + 144.5%, Caras-Severin +115.0%, Dambovita +63.2%, Dolj +191.8%, Ialomita +102.3%, Iasi +126.7%, Maramures +86.7%, Salaj +100.2%, Suceava +225.6%, Teleorman +90.0% and Vrancea +93.5%.
- In the fourth category there are 19 counties, with a share of total exports drastically decreasing from 26.6% in 2008 to 18.4% in 2014; however dynamics of export per capita in 2014 compared to 2008 are increasing in counties such as Bacau +51.0%, Botosani +51.3%, Braila +20.9%, Calarasi +43.5%, Cluj +2.7%, Covasna +58.9%, Gorj +58.7%, Harghita +24.5%, Hunedoara +58.1%, Mures +29.0%, Neamt +27.3%, Prahova +55.1%, Satu-Mare +35.1%, Tulcea +41.8% and Vaslui +12.9%. The rest of the counties recorded large decreases in 2014 compared to 2008: Valcea (-40.9%), Galati (-33.0%), Giurgiu (-19.4%) and Mehedinti (-35.4%).

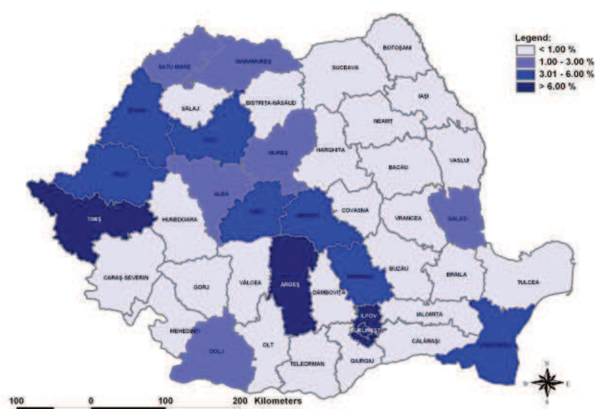
5.3 Import and trade balance

Although exports had a high resilience to the crisis, it had a limited impact on GDP because, in the quantification of contribution to GDP, the net exports are taking into account (difference between exports and imports), but also because they involve usually an increase in imports (reflected in the import content of exports), which limit the contribution of international trade to economic growth.

The share of the top 10 counties in total Romanian imports slightly decrease in 2014 compared to 2008 from 75.7% in 2008 to 74.7% in 2014. The biggest drop of the share (in percentage points pp) was recorded in Bucharest (-9.8 pp). However it kept the leading position among the top counties on import with over 28% of total imports of Romania in 2014. Significant increases of share, in 2014 compared to 2008, recorded the following counties:

- Arges +2.6 pp (dynamic 2014/2008 +73.3%) climbed three positions in the top, from position 7 to position 4;
- Arad +1.6 pp (dynamic 2014/2008 +68.3%) climbed three positions in the top, from position 10 to position 7;
- Timis +1.6 pp (dynamic 2014/2008 +31.9%) climbed one position in the top, from position 4 to position 3;
- Brasov +1.2 pp (dynamic 2014/2008 +44.1%) climbed one position in the top, from position 9 to position 8.

Figure 10 - Shares of counties on Romanian import in 2014



Besides Bucharest, significant decreases in the shares of the total import in 2014 compared to 2008 recorded the following counties:

- Galati with -1.4 pp (dynamic 2014/2008 was -47.3%) fell six positions in the top, from position 8 to position 14;
- Cluj with -0.6 pp (dynamic 2014/2008 was -12.8%) fell four positions in the top, from position 6 to position 10.

Table 12 - Top 10 counties in total imports of Romania in 2008 and 2014

2008			2014		
No.	**County**	**Weight**	**No.**	**County**	**Weight**
1	Bucureşti	37.9	**1**	Bucureşti	28.1
2	Ilfov	6.4	**2**	Ilfov	7.2
3	Constanţa	5.6	**3**	Timiş	7.1
4	Timiş	5.5	**4**	Argeş	6.3
5	Prahova	4.4	**5**	Constanţa	5.9
6	Cluj	3.9	**6**	Prahova	5.2
7	Argeş	3.7	**7**	Arad	4.2
8	Galaţi	2.9	**8**	Braşov	4.0
9	Braşov	2.9	**9**	Bihor	3.4
10	Arad	2.5	**10**	Cluj	3.3

In the 2008-2014 period there was a huge drop in the external trade deficit of Romania (dynamic 2014 / 2008 was -74.2%), from -23.5 billion Euro in 2008 to -6.1 billion Euro in 2014.

At county level, the largest contribution to reducing the Romanian external trade deficit had Bucharest (42.8% of reduction), with a decrease in the external trade deficit from -15.3 billion Euro in 2008 to -7.8 billion 2014 (dynamic 2014/2008 was -48.8%). Another important decrease in the external trade deficit had county Ilfov, from -3.0 billion in 2008 to -2.1 billion in 2014 (dynamic 2014/2008 was -30.2%).

Some counties had positive external trade balance in 2008 and this increased in 2014, as follows: Arges county from +0.35 billion Euro in 2008 to +1,43 billion Euro in 2014 (dynamic 2014/2008 was +313.5%) and Alba county from 0.12 billion Euro in 2008 to +0.53 Euro in 2014 (dynamic 2014/2008 was +336.3%).

From classification of counties based on the trade balance in 2014 resulted 29 net exporting counties (with a positive external trade balance of +6.48 billion Euro in 2014 compared to only +0.22 billion in 2008) and 13 net importing counties (with a trade deficit of -13.19 billion Euro in 2014 compared to -23.50 billion Euro in 2008).

Table 13 - Classification of counties based on external trade balance in 2014

No.	**Net exporter (export>import)**	**External trade balance**	**No.**	**Net importer (import>export)**	**External trade balance**
1	Argeş	1430.1	**1**	Satu-Mare	-20.3
2	Timiş	681.4	**2**	Suceava	-25.3
3	Olt	638.4	**3**	Harghita	-33.0
4	Alba	534.1	**4**	Bihor	-39.2
5	Arad	409.0	**5**	Bacău	-47.1
6	Sibiu	348.7	**6**	Giurgiu	-68.0
7	Maramureş	317.1	**7**	Galaţi	-75.6
8	Sălaj	239.1	**8**	Mureş	-128.3
9	Dolj	189.9	**9**	Constanţa	-814.4
10	Buzău	163.2	**10**	Cluj	-901.3
11	Hunedoara	144.9	**11**	Prahova	-1096.5
12	Bistriţa-Năsăud	133.0	**12**	Ilfov	-2105.3
13	Braşov	124.1	**13**	Bucureşti	-7830.9
14	Călăraşi	119.3			
15	Brăila	118.4			
16	Dâmboviţa	113.8			

No.	Net exporter (export>import)	External trade balance	No.	Net importer (import>export)	External trade balance
17	Iaşi	110.4			
18	Neamţ	97.6			
19	Teleorman	93.8			
20	Vâlcea	88.5			
21	Tulcea	73.7			
22	Caraş-Severin	72.1			
23	Ialomiţa	64.2			
24	Covasna	50.4			
25	Botoşani	46.5			
26	Vaslui	31.0			
27	Vrancea	24.0			
28	Mehedinţi	21.3			
29	Gorj	2.3			

6. Conclusions şi final remarks

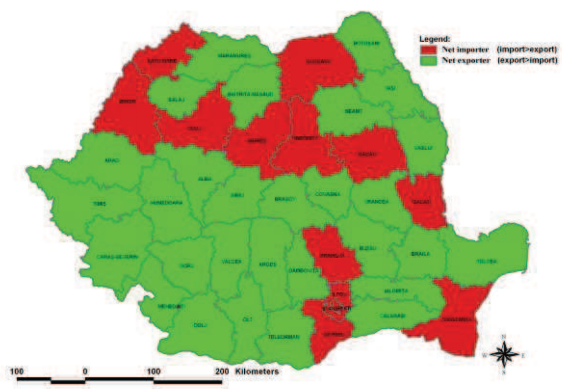
Analysis of Romania's external trade during the period 1990-2014 leads to the following conclusions:

- Exports and imports increased over the four periods analysed, so that we can say that openness of Romanian economy is relatively high, which implies not only opportunities for external trade, but also concerns for increasing resilience of the national economy to the possible external shocks and vulnerabilities;
- If in 1990, at the beginning of pre-association period, exports of goods and services amounted approximately 6.4 billion USD, by the end of 2014 they increased by 12.8 times, exceeding 82 billion USD.
- Imports of goods and services have increased by about 8.4 times in 2014 compared to 1990.
- Although the growth of exports is higher than of imports, the volume of imports is greater than exports in 2014 compared to 1990, the net balance having an ascending trend along the periods analysed.
- The average negative trade balance of Romania increased by around 12-times in the current post accession period as against the period 1990-1995. As against the period 2001-2006, the average negative trade balance increased by around 3-times, due to the negative impact of the international financial crisis and the difficulties inherent in adapting to the strictness and competition on the Single Market of EU.
- Romania fails to compensate imports by exports, a situation reflected in trade deficit. The level of imports - exports coverage rate indicates the maintaining of a higher level of imports for a given volume of exports, a situation caused by the high dependence of the economy imports.
- Persistent trade deficit can affect economic growth and stability. It involves enhancing the efficiency of policies for promoting foreign investments and increasing the credibility of the entire set of the economic policies.
- Structure of Romanian exports is dominated by products with low and medium technological level that have relatively low added value incorporated. Investments in productive assets, infrastructure and know-how are a

prerequisite and foundation for economic growth and sustainable development in all countries. They will results in growing hich-tech exports, with more vakue-added incorporated.

- Romania's economy is heavily dependent on the Eurozone, which is vulnerability, but in recent years it has been observed further increase the degree of geographical diversification, exports to non-EU countries is increasing.
- although Romania's total exports has shown a quit good resilience, there are still counties who have not exceeded exports from 2008 nor in 2014. The share of the top 10 exporting companies and top 10 countries of destination for counties export over 50% in 2014, for almost all counties, reveals a strong dependence of counties exports by a few big exporting companies (in majority with foreign capital) and several destination countries (mostly from European Union). However, the increase in external demand for products of a county, according to the basic Keynesian theory, contributes to its economic growth.
- the positive external trade balance at the county level may have a positive impact on the economic development of the county if the exports refer to high technology products. If this positive trade balance is based on exports of raw materials and semi-products, under conditions of low imports, it will have a negative impact on sustainable economic growth of the county in question (immisering exports). The most counties that have kept the positive external trade balance in the 2008 – 2014 period are in this situation.

Figure 11 – External trade balance at county level in 2014



- The counties with negative external trade balance must act to reduce the external trade deficit in the medium and long term. However, a negative trade balance deficit may have a positive impact on sustainable economic development if it is based on the high-tech products imports, local assimilated through technology transfer.

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