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29 May 2015

Online at https://mpra.ub.uni-muenchen.de/64678/
MPRA Paper No. 64678, posted 29 May 2015 13:34 UTC

Endogenous regional growth and foreign trade, in Romania

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Abstract:

Under the global and financial crisis impact, the structure of regional and local trade flows witnessed significant changes. In this context, Romania's exports are dominated by the cars, devices, electric equipment, transportation means, agricultural food products', chemical, basic metals, textiles and footwear industry, etc. The exported goods have, to a large extent, a low technological level, being controlled by a small number of companies that have a relatively high share in their volume and being, as a rule, direct foreign investments. In the Romanian' top of exporters and importers we found the same counties where operates, as a rule, at least one large company with foreign capital.
The study paid a specific attention to the crisis impact on foreign trade in Romania, focusing on export sector as revealing the endogenous growth generating potential at regional and county level.

Keywords: endogenous growth, global crisis; foreign trade, export resilience

JEL Classification: R1, R10, R11, F12

General Aspects

Regional development represents both the outcome of exogenous factors but also of the endogenous ones, their impact being different in time and space. From the chronological viewpoint, the exogenous factors were important, in particular, during the first stages of regional growth, their effects being relatively difficult to control. In the subsequent actual development states, the importance of regional endogenous factors turns major, as these are influenced in their turn by the quality of the technologies, the regional supply (exports) and demand (the capacity to attract domestic and foreign capital, labour force, etc.).

The relationship endogenous development – export is very important for attaining a high level of competitiveness and specialisation, contributing to the development of the knowledge society and to circumscribing the economy on a sustainable trajectory. Even though there are some limits in using export in regional analyses (especially determined by the lack of statistical data), a series of benefits can be reminded of focusing on the export (import) – regional economic growth relationship, a link that is deepened in the studies developed by Frankel and Romer (1996). They have highlighted the benefits of an open economy in the context of Solow's growth model, underpinning the importance of exports for endogenous growth.

According to Hausmann and Klinger (2007), the easiness with which a national or regional economy can make exports depends to a large extent on the accumulated knowledge and the existing capacities. The starting hypothesis in promoting this statement is that the regions which gain competences in manufacturing a certain product can more easily redistribute the human, material and institutional capital, if they share commonalities to others that have already realised that product. The closeness between products is based on the so-called *probability on pairs* which means that a region can export a certain product considering that it exports also another product ("product space").

In Romania, at regional level, export is dominated by the cars and related tools sector, which generates strong links not only with the tools and metal sector, but also to the one of electronic products, rubber, plastic, chemical products and other key sectors.

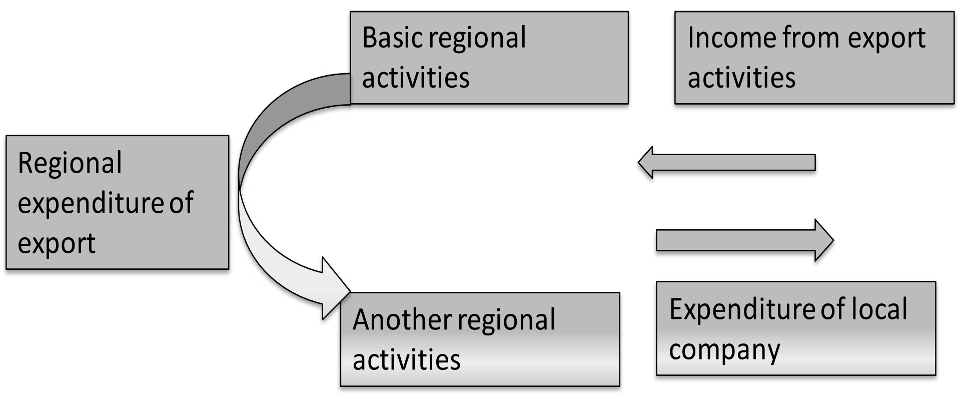
Influencing competitiveness and specialisation at territorial level, the export is regarded as a factor with major contribution to regional growth, but also a source for the emergence of economic and social inequalities in territorial profile. This aspect was showcased and detailed within some trends of economic thought, as follows:

- *Keynesian approach* (basic theory): maintains that external demand for goods and products of a region contributes to the region's economic growth;
- *Post-Keynesian growth theories*: reveals that productivity and competitiveness based on prices stimulates exports, and the regional export markets generate growth by the multiplication effect;
- *Heterodox* orientation: aims, in particular, to the growth poles theory of Perroux, the theory centre-periphery, the self-centred development;
- *Classic traditional orientation*: industrial underpins the importance of the analysis of the industrial complex, of specialisation;
- *The theory of international exchanges*: lays emphasis on the analysis of international inequalities (production cycle, the centre-periphery analysis) ;
- *Studies and researches, papers oriented on the analysis of regional disparities* from the sixties and seventies aiming to the spatial division of labour (Friedmann J., Holland S.);
- *Integrated models of regional development* (Isard W. şi Greenhut M.,1956).

Regional specialisation based on export products is presented and analysed in the neoclassic theories regarding comparative advantages, in the sense that regions become specialised and export goods and products that have as basis the raw resources abundant in the area: raw materials, labour force, capital (Armstrong, 2000).

The regions react to the external demand by stimulating production increases in the sectors that are essential for exports. The most important factors of influence for the regional economy are the prices of exports, the incomes' level from the regions and the price of the substitution products on the domestic and external market. The multiplying effect related to regional incomes and expenditures stimulates differently the regional or local economy, either positively or negatively. The theory of endogenous growth based on exports gives particular importance to specialisation, diversification and to the positive impact of external demand (Figure 1).

Figure-1 Mechanism of regional endogenous growth



Source: Compilation after Pike A., Tomaney J., Local and regional development (2006)

The international competitiveness of the export sectors depends on the quality of the products and services from the region, on the cost of the production factors (capital, wages, raw materials, technologies, intermediary goods, etc.), as well as on the effects of scale, the endowment with production factors, the closeness to markets or other developed areas, etc.

The elasticity or sensitiveness of demand for the exports of a region trigger changes at the level of prices and incomes; the presence of equilibrium between regional demand and supply creates the premises for initiating regional growth but also for the inequalities between the regions.

The regional growth based on export can be a cumulative process, from the viewpoint of incomes, the induced effects being the acceleration of investments, the increase of employment within the region, and of the demand for local products and services, for the development of secondary industries and of external economies, etc. (Taylor, 2000).

Under the current conditions of accelerated globalisation and economic integration, export is regarded as an important (even driving) factor of regional development, triggering also the increase of competitiveness between the regions save for the case of the so-called pauperisation or immiserizing exports[1].

1. Trends in the development of Romania's foreign trade in the period 2008-2013, in territorial profile

The outbreak of the global financial crisis in 2008 affected negatively the exports and imports of Romania, the magnitude of the negative impact highlighting the increasingly closer links between the national economy, the EU one and the one of the other states of the world. The global dimension of the crisis underpinned the high degree of connections between the various financial, goods and services' markets, and a strong process of swift propagation of the unfavorable negative effects of the crisis on the regions of the world (Ghibuţiu, 2011).

1.1. The analysis of exports at regional and county level

From spatial perspective, the export is determined to a relatively high share on the urbanisation degree of the area and on the endogenous potential based on natural resources or relatively cheap and well-trained labour force.

In the period 2008-2013 was found a slight increase of the exports' structure for Romania, on fields with higher value added. The highest weight in Romania's exports is held by cars, devices, equipment, transportation means, respectively about 42.2% (in the year 2013), and thereafter are placed at considerable difference agricultural food products (12%), chemical products (11,2%), basic metals (10,3%), textiles and footwear (5,6%), etc. (See *Romania's commercial exchanges on counties*, Ministry of Economy-Foreign Trade Department).

The concentration degree on certain sectors (for instance car industry) increased and it could turn into a vulnerable point yet, only under certain economic conditions. The electric equipment and mechanic devices, the transportation means and textiles represent half of Romania's exports. The weight of transportation means in total exports tripled in the last ten years from 5.7% to 17%, thus ranking on the second position in the top of the most important exporting sectors. A vulnerable point of Romanian exports is the relatively high and constant weight of the raw materials' exports (vegetal products, oil, charcoal, metals).

[1] Pauperisation exports take place when their quantitative growth leads to a decrease in the value of foreign exchange cashing and implicitly of the endogenous regional growth potential, especially as result of deteriorating terms of trade, as well as of an inferior processing degree, and a relatively low valuation of exported goods (Bhagwati, J., 1958; Johnson, H., 1955; Raymond, L.,C., Whalley, J., 1994).

The development regions participate differently to achieving the exports (Table 1). Thus, an analysis of the exports on regions and product sections, for the period 2008-2013, shows the presence of visible disparities between the regions: the most important contribution to the national export is of the region Bucharest-Ilfov, with a weight of 21.06% from total exports, but with a slight decreasing evolution. This region is followed by two other regions – West and South – which, together, cumulate approximately 30% (each with about 14.5%). The last position is held by the region North-East, the least developed of the regions, with a participation to total exports of only 4%.

For the analysed period, there are also regions that registered an increase of the weight in total value of exports (South, West and Centre). The export of these regions depends preponderantly on the activity of some strong local companies from the economic viewpoint and, as a rule, with foreign capital. The analysis of exports' weight at regional level from the viewpoint of the turnaround highlights (2013 against 2008), that three out of the eight regions have not recouped the decline generated by the crisis (Bucharest-Ilfov South, East and South-West).

Table 1: Contribution of Romania's regions to total export, in the period 2008-2013 (% in total)

Region	Years of:					
	Pre-crisis	Economic and financial crisis		Post-crisis recovery		
	2008	2009	2010	2011	2012	2013
North-East	4,66	4,32	4,45	4,39	4,99	4,74
South	14,47	16,68	16,61	16,91	17,02	16,42
Bucharest-Ilfov	21,06	21,27	19,05	19,79	20,64	20,79
West	14,70	14,22	14,41	14,72	15,67	16,30
South-East	13,43	11,73	10,95	10,73	10,44	10,35
North-West	11,49	13,56	16,15	15,60	12,34	11,52
Centre	12,62	12,52	13,24	12,86	13,49	13,83
South-West	7,57	5,69	5,13	5,00	5,41	6,06
Total	100	100	100	100	100	100

Source: Own processing of the authors after *Romania's Commercial Exchanges in the period* 1.01. – 31.12.2012 and in the period 1.01.-31.12.2013, Ministry of Economy, Department of Foreign Trade and International Relations

The annual growth rates of the exports at regional level registered different values from one region to the other; thus, in the year 2013 the first place is held by the South-West region with an increase of 22.81%, as compared with the preceding year, followed by the West region (Table 2).

Table 2: Evolution of the indices with chain-basis of Romania's exports on development regions for the period 2008-2013 (%)

Region	2009/2008	2010/2009	2011/2010	2012/2011	2013/2012	2013/2008
North East	-20,78	31,03	21,59	12,97	4,21	48,57
South	-1,29	26,60	25,54	-0,09	5,85	65,92
Buc.-Ilfov	-13,55	13,88	28,08	3,58	10,50	44,31
West	-17,18	28,85	25,91	5,70	14,17	62,15
South East	-25,22	18,70	20,80	-3,44	8,80	12,66
North West	1,04	51,38	19,17	-21,49	2,43	46,57
Centre	-15,14	34,51	19,78	4,10	12,52	60,15

South West	-15,63	14,57	20,21	7,50	22,81	53,42
Romania	-12,84	27,15	23,32	-0,72	9,73	48,88

Source: Ibid. as Table 1

The NORTH – EAST region exported, in the year 2013, products on value of 2.28 billion euro, with an increasing trend as compared with the value registered in the year 2008 (+48,5%). The main goods exported to represent 63.4% from the exports of the region were: textiles and textile articles, machinery and devices, electric equipment and spares; sound recording and playing devices, video and sound recording and playing devices, television sound devices, accessories and spares, and components thereof, wood, charcoal, and wood articles; cork and cork articles; vegetal fibre plaiting articles, or basketry that have weight in the export of the region, etc.

SOUTH-EAST region: in the year 2013, the export of goods had a value of 5.83 billion euros, by 13% higher as compared with the year 2008. On export goods' sections, about 72.8% from the exports of the region were: vehicles, aircrafts, vessels and auxiliary transport equipment, basic metals and articles made from basic metals, mineral products.

SOUTH – MUNTENIA Region: the export of goods had a value of 6.65 billion euro (year 2013), by 66% more than the year 2008. The structure on fields of exported goods was: vehicles, aircrafts, vessels and auxiliary transport equipment, machinery and devices, electric equipment and components; sound recording and player devices; image recording and player devices, television sound devices and spare parts and components thereof.

SOUTH-WEST OLTENIA Region: in the year 2013, the recorded exports had a value of 2.97 billion euro, on increase by about 17% as compared with the values registered in 2008. The main sections of export products, that represented 78.1% from the exports of the region were: basic metals and common metal articles; vehicles, aircrafts, vessels and auxiliary transport equipment, plastics and plastic articles, rubber and rubber articles; machinery and devices; electric equipment and components; sound recording and player devices; image recording and player devices, television sound devices and spare parts and components thereof

WEST Region: products and goods were exported with a total value of eight billion euro, on increase by 62% against the year 2008. The main sections of export goods which represented 67.2% from the exports of the region were: machinery and devices; electric equipment and components; sound recording and player devices; image recording and player devices, television sound devices and spare parts and components thereof, vehicles, aircrafts, vessels and auxiliary transport equipment, textiles and textile articles; plastic and plastic articles; rubber and rubber articles.

NORTH-WEST Region: the value of exports recorded for the year 2013 was of 5.65 billion euro, by 47% higher as compared to the one from the year 2008. The main sections of export goods that represented 68.5% from the exports of the region were: machinery and devices, electric equipment and components; sound recording and player devices; image recording and player devices, television sound devices and spare parts and components thereof, textiles and textile articles, various wares and products.

CENTRE Region: in the year 2013, the region exported products and goods in value of 6.79 billion euro, as this region recorded the highest growth as compared with the year 2008 (+60%). Approximately 65.2% from the exports of the region are machinery and devices; electric equipment and components thereof; sound recording and player devices; image recording and player devices, television sound devices and spare parts and components thereof; textiles and textile articles; vehicles; aircrafts, vessels and auxiliary transport equipment, wood, charcoal and wood articles; cork and cork articles; vegetal fibre braids and wicker basketry.

In the year 2013, the region **BUCHAREST-ILFOV** reported exports in value of 10.21 billion euro, on increase by 44% as compared with the value recorded in 2008. The main sections of export goods to realise 60.1% from the exports of the region were: machinery and devices; electric equipment and components; sound recording and player devices; image recording and player devices, television sound devices and spare parts and components thereof; mineral products, vegetal products, basic metals and common metal articles.

At county level, in the year 2013, the most important weights in Romania's exports (Table 3) were held by the Bucharest municipality (17.36%), Arges county (10.25%), Timis (9.38%), Arad (5.07%), Constanta (4.92%), Brasov (4.64%), Sibiu (4.08%), Prahova (3.38%). These counties maintained for the analysed period their ranking in the national top of exporters, with slight differences, and were noticeable for putting to good use the local endogenous potential (existing endowment, local labour force, localisation advantages, etc.) that attracted the interest of foreign investors, who are present to a large extent in the respective regions.

Table 3: Counties' top in total exports of Romania in 2013 against 2009 (%)

2009			2013		
Rank	**County**	**Weight**	**Rank**	**County**	**Weight**
1	Bucharest Municipality	18,47	**1**	Bucharest Municipality	17,36
2	Arges	9,83	**2**	Arges	10,25
3	Timis	8,36	**3**	Timis	9,38
4	Constanta	5,45	**4**	Arad	5,07
5	Cluj	5,08	**5**	Constanta	4,92
6	Arad	4,28	**6**	Brasov	4,64
7	Brasov	4,04	**7**	Sibiu	4,08
8	Prahova	3,89	**8**	Bihor	3,94
9	Sibiu	3,69	**9**	Ilfov	3,43
10	Olt	3,12	**10**	Prahova	3,38

Source: ibid as Table 1

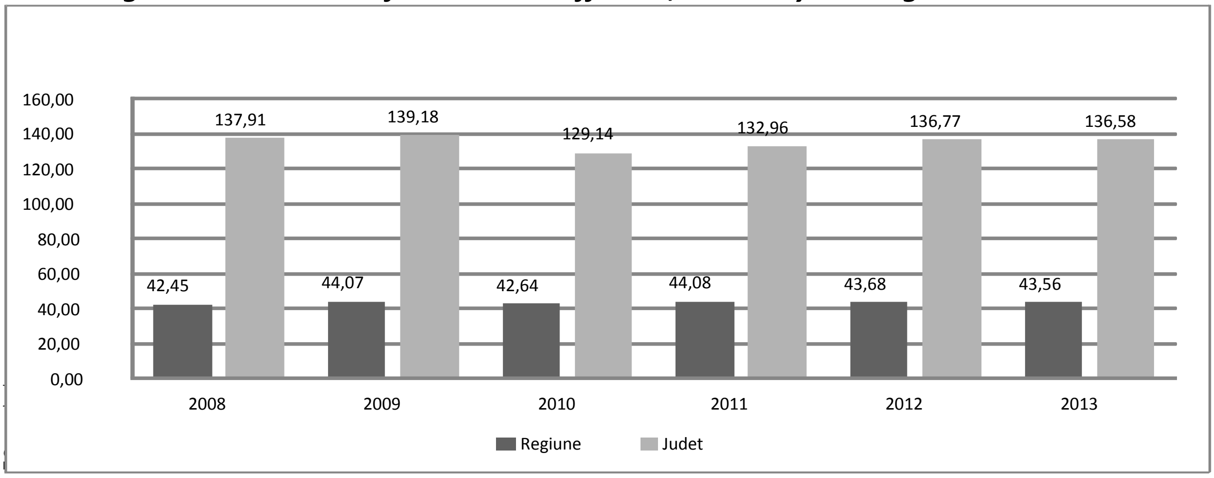
Yet, two counties (Cluj and Olt) failed to maintain their ranking among the first top 10 exporters from Romania, their rank being taken in 2013 by the counties Bihor and Ilfov.

In the following, we intend to realise a series of qualitative comparisons at county and region level regarding the export activity, for the period 2008-2013, when export registered variations from one county to the other, and from one region to another, under the impact of the world economic and financial crisis.

In order to provide insight about the disparities regarding the exports at counties' (NUTS 3) and regions' level (NUTS 4) in Romania, classic techniques of econometric analysis were used, the main outcomes being presented in the following tables/annexes.

The analysis of the variation coefficients (standard deviation in relation to the average) highlights the higher values at counties' level against the ones of the regions (Figure 2).

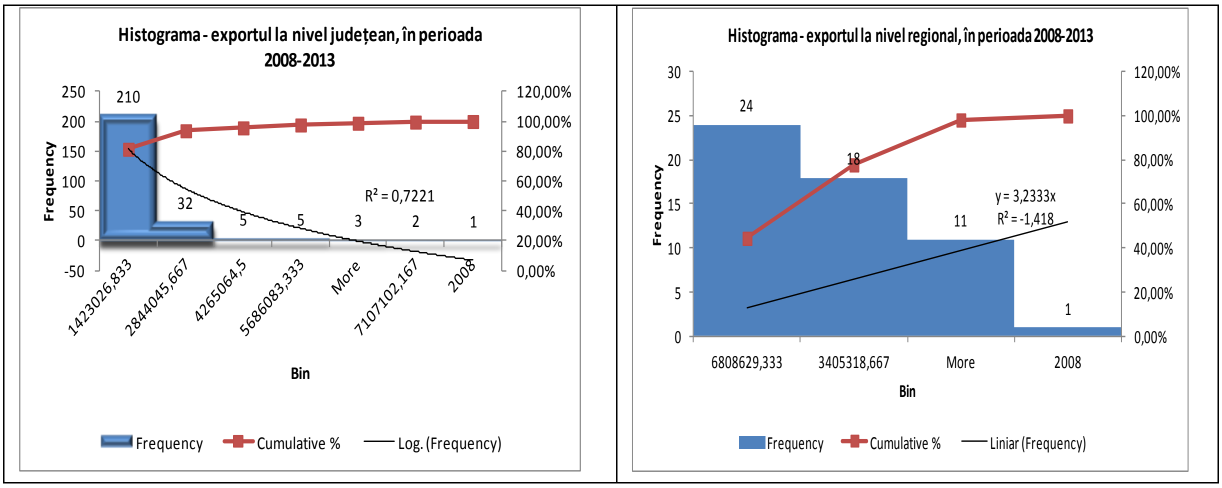
Figure 2 – Evolution of variation coefficient, at county and regional level



Source: ibid as Table 1

The analysis of the exports' histogram realised both at regional and county level shows that disparities are higher between the counties (intra-regional) and lower between the regions (interregional). For the counties the difference between the minimum and maximum value of the export is of 1:6, while the ratio corresponding to the regional level is of only 1:2 (Figure 3).

Figure 3: Histogram – export at regional and county level for the period 2008-2013



Source: own processing of the authors

The histogram of the exports at county level reveals a diminishment trend for the disparities in territorial profile, even if the region Bucharest-Ilfov still has about ¾ from the volume of Romania's commercial exchanges (year 2013). Still, the decreasing trend of inequalities with respect to the volume of commercial exchanges is given by some new counties (as compared with the year 2008) which develop either important industrial activities (for instance, Arges, Dolj, Olt), or which have access to waterways (Galati, Constanta), or which are internal border counties of the EU (Timis, Arad, Maramures).

It is found that the largest part of the exports is concentrated in a relatively low number of large companies with majority foreign capital (Table 4).

Table 4: The largest exporters from Romania, in the year 2012

Rank	Company	Region	Weight in Romania's total exports	From which: weight in intra-UE-27 export
1	Automobile Dacia	Mioveni/Argeş Regiunea Sud	6,9%	76,21%
2	RomPetrol	Constanţa/Sud Est	2,39%	19,49%
3	ArcelorMittal	Galaţi/Sud Est	2,23%	12,11%
4	OMV Petrol	Bucureşti/B-I	2,18%	52,51%
5	Grup Servicii Petroliere	Constanţa/Sud Est	1,57%	7,21%
6	Petrotel Lukoil	Ploieşti/Prahova/Sud	1,42%	67,87%
7	Daewoo-Mangalia Heavy Insutries	Mangalia/Constanţa	1,36%	63,53%
8	Continental Automotive Products	Timişoara/Timiş/Vest	1,12%	87,36%
9	Michelin	Bucureşti/B-I	1,06%	79,5%
10	Alro	Slatina/Olt/Sud Vest	1,05%	88,54%
11	Autoliv	Braşov/Brasov	1,05%	81,64%
12	Celestica	Bors/Bihor	1,03%	100%

Source: Ministry of Public Finances

The top of exporters from Romania is dominated by Automobiles Dacia, Rom Petrol Refinery SA, Arcelor Mittal, OMV Petrol, Grup Servicii Petroliere, Petrotel Lukoil, Daewoo, Michelin, Alro, etc. In the year 2013, this national top underwent changes from the viewpoint of exporters with foreign capital, as follows: Automobiles Dacia maintained the first position, while Acelor Mittal was replaced by SC Ford Romania SA, the third position being taken over by SC Rompetrol Refinery SA (OMV fell on the forth position). The fifth and sixth positions were taken by Honeywell Technologies and Flextronic Manufacturing Europe.

The impact of FDI companies on the endogenous regional and national growth must be analysed in a complex manner, both from the viewpoint of advantages and from the one of disadvantages. With respect to the advantages we can identify the managerial expertise, the distribution channels of exports on external markets, the know-how and superior technologies, the relatively high wages in some sectors and a higher labour productivity. On FDI types, the highest effects on endogenous growth have FDIs of the *greenfield* type and the vertical ones, those from the *tradable* field and those from high-tech industries. From the perspective of "horizontal" FDIs, the ones in the field of mergers and acquisitions don't have a favorable propagation effect, these entering in many instances in competition with the national production. Last but not least, in the framework of analysing the FDI impact on the national economy, is necessary to consider the relationship between the reinvested and repatriated profit, the transportation prices and intra-group crediting (between mother-companies and subsidiaries in Romania).

The interest of foreign investors is shown for the opportunities provided by Romania: export of own technologies and sale of the output obtained on the domestic market, or export thus achieving higher profits (Zaman, 2012).

Most of these companies are localised on one hand in the non-tradable sector and services, and on the other hand in the region Bucharest-Ilfov which holds about 61.4% from the FDl stock (existing by the end of the year 2013). Also, the first four countries ranked depending on the weight held in the FDI stock ISD (on 31 December 2013) are the following:

the Netherlands (24.4 %), Austria (19.1%), Germany (11.2%) and France (7.6%), as this hierarchy remains unchanged since the year 2009.

In the year 2013, the total volume of exports of the enterprises with foreign private capital (FDI) was of 33.623 million euro (*Foreign Direct Investments in Romania in the year 2013*, NBR, NIS). As structure, there are fields that already have a higher weight and are supporting this activity intensively, these being, according to their contribution to Romania's total exports, the following: manufacturing industry (60.8%), from which the transport means industry (24.4%) and textiles-clothing (6.7%), and trade as well (6.6%).

The imports realised by the FDI enterprises in the year 2013 were of about 34.292 million euro, which represented 64.5% from Romania's total imports. The fields in which the largest imports were made, with a significant contribution to the national total, were: manufacturing industry (43%) and trade (17.9%).

The trade of balance analysis for the FDI companies in the year 2013 in Romania highlights a negative balance of -632 million euro, on decrease as compared to the years preceding the crisis (2007, 2008), and against the year 2009 when the trade deficit recorded very high levels. Also, for the entire reporting period was found that the balance of trade deficit in Romania turned chronic due to FDI enterprises which currently represent a share of about 70.6% from the total exports of the country and, respectively, of 64.3% from the imports. This deficit of the balance of trade is differentiated on development regions and counties at higher or lower levels. It can be seen that at macroeconomic level, FDI enterprises did not contribute to the sustainable development of Romania because these failed to generate the balance of trade surplus that would ensure the sustainability of the foreign payments balance.

1.2 Analysis of export on predominantly urban and rural regions

In the year 2014, the total population's structure of Romania, on areas was of 56.43% in the urban area, and 43.57% in the rural area. In the year 2008, the urban population registered an increasing trend by 4.5%. As compared with the weight of urban population within the European Union of 75%, the urbanisation level from Romania is relatively low.

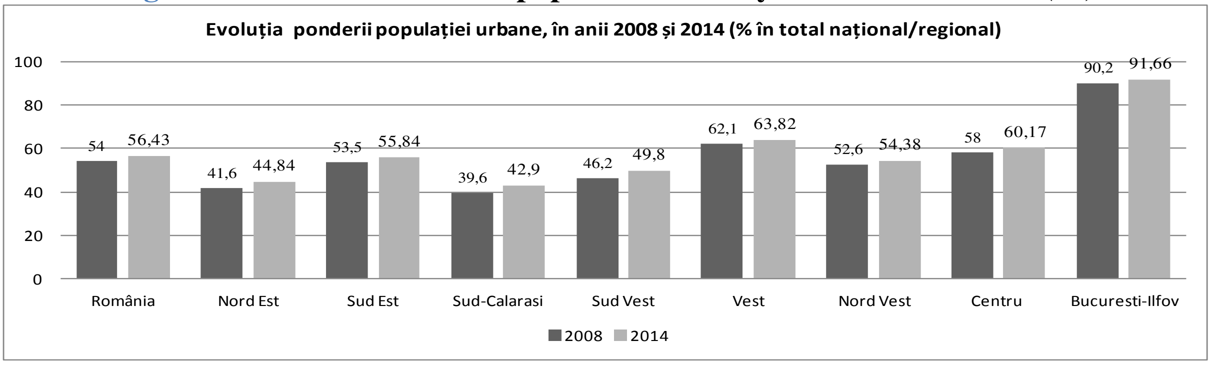
According to OECD[2], the regions can be either urban or rural if they are framed within one of the following sections:

a. Predominantly rural (rural population of over 60% from total population),
b. intermediary (40%-60% urban population),
c. predominantly urban (the weight of urban population must exceed the threshold of 60% in total population).

Romania's regions are, in fact, **rurban regions** (areas at the borderline between the zones with agricultural activities and the sub-urban and urban ones). The most urbanised region is Bucharest-Ilfov, with a weight of urban population in the year 2014 of 91.66 % (on increase from 90.2% in the year 2008), and the least urbanised one is the region North-East (44.84% - a percentage on increase from 41.6%). The predominantly urban regions from Romania are: West (63.82%) and Centre (60.17%) (Figure 4).

[2] In 2010, the European Commission agreed on a new typology of predominantly rural, intermediary and predominantly urban regions, based on a change in the OCDE methodology.

Figure 4: Evolution of urban population in the years 2008 and 2014 (%)



Source: own calculations based on the data from the Statistical Yearbook of Romania in the years 2008-2013

Regional export is proportional correlated directly to the urbanisation degree which, as a rule, is characterised by a more consistent endogenous regional potential, based on the human capital with a high level of professional training. In Annex 9.1 we present the weights of the main sections within the Combined Nomenclature, on urban and rural regions, detailed on counties.

Despite the large structural diversity of exports on various sections of goods and services, we can deduce that the regions and counties with a relatively high degree of urbanisation were characterised by exports with value added and higher complexity, which emphasises the substantial potential of endogenous growth.

In conclusion, the export activity depends to a large extent on the way in which a state or regions capitalise on their endogenous potential, including accumulated knowledge and existing capacities. Due to the positive impact on regional competitiveness and specialisation, export is regarded nowadays as an important factor of economic growth, but also as a source for the emergence of territorial disparities. This increase based on export is considered as a cumulative process which speeds up the local investment process, employment, domestic demand and the development of secondary industries.

1.3 The balance of trade at regional and county level

In the period 2008-2013, exports supported to differing shares the regional economies, as a positive correlation existed between their ascending trend and the evolution of the regional GDP. Even though export represented and important driver for the GDP of some regions (West, South, Centre), still it did not succeed in re-launching itself in the more developed regions (Bucharest-Ilfov). The limited impact of exports is due to the fact that in quantifying the contribution to GDP, net exports are taken into account (the difference between exports and imports), but also the fact that it triggers, as a rule, an increase of imports (reflected in the import content of exports), thus limiting the contribution of foreign trade to economic growth.

The evolution of imports at regional level in the period 2008-2013 shows a series of particularities (Table 5). During the crisis (2009), some regions diminished their contribution to total imports of Romania, the respective regions being South-East, South-West, Centre and Bucharest-Ilfov. As of 2010, a recovery to the initial weights is found (South-East, South-West and Centre) and even an increase of the contribution to total national imports (North-East, South, West and North-West). The year 2013 shows a different image against the year

2008, that is the region Bucharest-Ilfov did not succeed in attaining the weight held before the crisis, yet it maintained its dominant position (36.7% from total imports). The regions that recovered and even exceeded the weights held in the year 2008 were South, West, North-West, and South-West.

Table 5: Evolution of the imports' weight at regional level in total imports of Romania, in period 2008-2013 (%)

Region	2008	2009	2010	2011	2012	2013
North East	3,35	3,47	3,70	3,91	3,99	3,66
South East	10,21	9,65	10,13	10,25	10,30	9,37
South	10,14	11,95	12,16	11,62	12,08	13,25
South West	2,87	2,69	2,74	3,35	3,31	3,65
West	9,16	10,00	10,57	10,87	11,16	11,98
North West	9,90	11,89	13,75	12,57	10,84	10,54
Centre	10,91	10,17	10,10	10,17	10,50	10,83
Bucharest-Ilfov	43,46	40,18	36,86	37,25	37,82	36,71
Total	100,00	100,00	100,00	100,00	100,00	100,00

Source: Ibid. as in Table 1

At county level is noticed, that to their vast majority (29 counties) they register positive values of the balance of trade (position of net exporter), the first places being taken by Arges, Timis, Olt, Alba with a surplus that exceeds 500 million euro (Table 6).

It should be remarked that the factory Dacia Renault maintains the county Arges in the national top of exporters from Romania. Covering the largest part of the South-West Oltenia region (about 50%), County Dolj is supported by the intensified activity of the factories Ford-Romania (Craiova) as well.

Table 6: Balance of trade classification, at counties level, in the year 2013 (thousand euros)

Rank at national level	Net exporter (export >import)	Balance of trade	Rank at national level	Net importer (import >export)	Balance of trade
1	Argeş	1.542.986	**1**	Gorj	-121
2	Timiş	862.065	**2**	Covasna	-598
3	Olt	609.541	**3**	Bacău	-4.171
4	Alba	554.817	**4**	Suceava	-11.000
5	Maramureş	314.699	**5**	Satu Mare	-16.581
6	Arad	286.561	**6**	Harghita	-18.070
7	Dolj	259.305	**7**	Giurgiu	-52.188
8	Sibiu	190.809	**8**	Mureş	-73.441
9	Tulcea	181.890	**9**	Constanţa	-618.474
10	Sălaj	180.915	**10**	Cluj	-797.129
11	Braşov	173.633	**11**	Prahova	-1.002.332
12	Călăraşi	172.071	**12**	Ilfov	-2.070.375
13	Hunedoara	162.504	**13**	Mun. Bucureşti	-7.938.985
14	Buzău	149.687			

15	Bistriţa Năsăud	139.174			
16	Neamţ	123.255			
17	Iaşi	112.798			
18	Brăila	111.218			
19	Caraş Severin	96.751			
20	Dâmboviţa	95.847			
21	Galaţi	71.364			
22	Vâlcea	64.463			
23	Botoşani	59.391			
24	Vaslui	33.478			
25	Bihor	32.332			
26	Mehedinţi	31.590			
27	Vrancea	24.467			
28	Ialomiţa	7.493			
29	Teleorman	3.372			

Source: Ibid. as in Table 1

Romania, due to the high dependency degree on the market of the European Union market, registered trade deficits in the first years but subsequently these registered a certain reduction. Romania's exports are dominated by the car, devices, electric equipment, transportation means, agricultural food products', chemical, basic metals, textiles and footwear industry, etc. The exported goods have, to a large extent, a low technological level, being controlled by a small number of companies that have a relatively high share in their volume and being, as a rule, direct foreign investments. In the national top of exporters and importers from Romania are found the same counties where operates, as a rule, at least one large company with foreign capital.

In conclusion, the export activity depends in a large share on the way in which a state or regions capitalise on their endogenous potential, including the accumulated knowledge and existing capacities. Due to the positive impact on the regional competitiveness and specialisation, export is regarded currently as an important factor of economic growth, but also as a source for the emergence of territorial inequalities. This growth based on export is considered as a cumulative process that speeds up the local investment process, employment, domestic demand and the development of secondary industries.

2. The profile of the export specialisation at county level

The neoclassic economic theory regards export as a major component of endogenous regional growth (Kaldor N., 1970). Moreover, the increase in regional exports depends to the largest extent on the growth of external incomes and, in its turn, influences at local level the competitiveness based on prices.

The recent theory of regional growth completes the model based on export, as elements are added that combine the interaction between economies of scale and the transportation costs. The theory of the new economic geography – NEG attaches to the endogenous growth the importance of the contagion effect of the technologies and of learning by practice, as well as aspects regarding urban agglomerations.

The export of a region has a pronounced *spillover* character generating an important exchange of information related to the external market, the diminishment of fixed operational costs and, thus, an increase of labour productivity. The process of exporters' agglomeration/concentration in a certain area triggers an increase in the information related to buyers and even to the quality of sellers, thus favouring the emergence of the so-called export based clusters and the increase in the performances of the region with respect to exports (Stiglitz J., 1977, Krugman P., 1979, Helpman E., Grossman G. 1985).

Export might become an important element of endogenous economic growth, provided that the *spillover* effect emerges, upwards and downwards, based on products with high value added and high-tech level that would generate in the region the development of related sectors.

2.1 Methodological aspects

The specialisation of regional exports on certain sections of products and services contributes to the strengthening of endogenous growth by using preponderantly local relatively abundant production factors

The analysis of the regional/local specialisation degree of exports, in Romania, based on the evolution of the structure on sections[3], according to the Combined Nomenclature and on each county shall highlight the export profile corresponding to each county, providing thus the possibility of extracting some aspects related to the impact of the economic and financial crisis, conjugated with the process of accession to the EU.

The analysis of the regional/local balance of trade and the development of the its balance for the reference years 2008, 2009 and 2013 took into account the following methodological and criterial approaches:

- *High specialisation degree* (the export of the category represents over 50% from the export of the county);
- *Medium-high degree of specialisation* (the export of the category represents 40-50% from the export of the county);
- *Medium-low specialisation degree* (the export of the category represents 20-40% from the export of the county);
- *Low specialisation degree* (the export of the region represents 20% from the export of the county).

In view of classifying the counties depending on the specialisation degree of exports were used the statistical data supplied by the Department of Foreign trade and International Relations of the Ministry of Economy (Information Bulletin no.12/2013, 2012), for the period 2008-2013, on sections from the Combined Nomenclature.

[3] The EC Regulation no. 2658/87 provides for a joint classification within the foreign trade statistic of the European Union (in accordance with the Common Customs Tariff) on sections. This Combined Nomenclature (CN) includes the following sections: I – Live animals and animal products; II – Vegetal products; III – Animal or vegetable fats and oils and their cleavage products; IV – Prepared foodstuffs, beverages and tobacco; V – Mineral products; VII – Plastics and articles thereof; rubber and articles thereof; IX – Wood and wood articles, wood charcoal; cork and articles of cork, manufactures of straw or other plaiting materials, basketry and wickerwork; X – Pulp of wood or other fibrous cellulosic material; waste and scrap of paper or paperboard; paper and paperboard and articles thereof; XI – textiles and textile articles; XV – Base metals; XVI – Machinery and mechanical appliances; electrical equipment and parts thereof; sound recorders and reproducers; television image and sound recorders and reproducers and parts and accessories of such articles XVII – Vehicles, aircraft, vessels and associated transport equipment; XX – Miscellaneous manufactured articles.

2.2 Obtained outcomes

The profile of export specialisation at county level is presented in the following:

A. <u>Counties with a high specialisation degree (over 50% from the counties' export)</u>

- The group of counties with high specialisation is dominated by the sections *XV-XVII* from the Combined Nomenclature;
- From among these, a high endogenous potential of supporting exports is shown by the county Arges, (even if there are some specific limitations: the lack of a highway Pitesti-Sibiu, the availability of skilled labour force, etc.). The county Arges – regarded as the *capital* of Romanian exports[4] - is dependent on the factories Dacia-Renault Romania (foreign investment), and within the county a true car cluster exists of about 40 companies supplying components for Dacia cars produced at (from among the largest 20 companies in the county, 12 work in the car industry or in the one of car components) The exports' weight of the section XVII in total exports of the county Arges increased even during the period of the crisis from 57% (in the year 2008) to 67.95% (in 2013) which indicates that the county has a high resilience capacity and an important potential of endogenous growth. It should be noticed that in the year 2009 (the first year of the crisis) the county Arges registered exports of over 68.18% in section XVII (vehicles, aircrafts, vessels and auxiliary transportation equipment) and of over 20.43% in the section XVI (machinery and devices, electric equipment and components thereof). If we total these two groups between which important relationships exist on the technological line, it results a share of 88.61% from the total export of the county. To this share, if we add 4.11% export of various wares, 2.01 basic metals (Section XV) and 1.58% plastics, rubber and rubber articles (Section VII), a weight of 96.31% results in the exports' of the county.
- Galati is another county with strong specialisation in exports' based on basic metals and articles thereof (Section XV). To a share of more than 90%, the export of the Galati county depends on the existence and operations of the steel complex Arcelor Mittal. As opposed to the county Arges, during the years of economic crisis, this county did not succeed in maintaining its position from the viewpoint of exports in Section XV, the weight decreasing abruptly from 90.19% (in 2008) to 58.5% (in 2013), the main reason being the steep decline in the international market of steel products.
- Mehedinti county is specialised in exports of the Section XVI, to which is added also the export of some compact wood products (Section X), textile articles (Section XI) and others.
- Next to the positive effect that the export activity can have, there are also a series of negative aspects such as, for instance, in county Cluj where a specialisation was registered according to Section XVI in the year 2009 of about 78.83% triggered by the activity of the Nokia company in the area (FDI). In the year 2011, after this company left, appears the so-called Nokia *earthquake*, the weight of machinery and electric devices exports' (Section XVI) in total exports of the county Cluj diminishing drastically to about 28.83%[5]. Still, county Cluj managed to remain a production and export pole due to the presence of some important companies such as Bosch, Emerson, Fujikura Automotive

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[4] According to the hierarchy of the values of the <u>Competitive Potential Index</u> at national level, county Arges is placed on the first position with a value of the index of 0.78 against the national average of 0.31, this being reflected in a high volume of total exports (second on the country) with the highest ratio between export and employed population (10.925 euro/individual) and the highest weight of medium-high technology exports (20.3% from the total on country and 24% from the total on county).(Source: www.mediafax.ro/economic/românia, septembrie 2014)

[5] Even though the exports of the factory from Jucu were high, the production was based on imports, so that the effect of halting the production on the trade of balance was rather low (http://businessday.ro/11/2011/efectul-nokia-productia-industriala-in-judetul-cluj-a-scazut-cu-25-in-septembrie/)

Romania, Electrica, the pharmaceuticals producer Terapia (controlled by the Indian Group Ranbaxy) or DeLonghi (while the factories with tradition from the municipality such as Napolact, Ursus, Tricotaje Somesul or Feleacul were closed one at a time).

- The counties Vrancea and Covasns specialised in the export of clothing (Section XI) presented a high degree of specialisation to the volatile export influenced by the crisis. If the county Vrancea maintained its export quota for the entire analysed period (on a decreasing trend), the county Covasna diminished its weight to under 50%. The only county with a high specialisation in textile exports that maintained constant its weight (on slight increase) was Botosani.
- Compared with the year 2008, from the 11 counties which were identified as having a high specialisation degree seven are still found also in the year 2013, from which only three increased their weight in the exports of the respective category in total county exports.
- In the year 2013, in the exports' specialisation top appear four new counties: Bistrita Nasaud (Section XVI), Dolj (Sec XVII), Iasi (Section XVI) and Suceava (Section IX[6] - wood, charcoal etc.) (Table 7[7]).

Table 7: High specialisation degree (export represents over 50% from the county's exports)

	County	**CN**	**2008**	**County**	**CN**	**2009**	**County**	**CN**	**2013**	**TREND OF SPECIALISATION (2013 against 2008)**
High specialisation degree	Argeş	XVII	57	Argeş	XVII	68,18	Argeş	XVII	67,95	*increase*
	Botoşani	XI	79,83	Bistriţa Năsăud	XVI	52,42	Bistriţa Năsăud	XVI	53	*increase*
	Cluj	XVI	61,05	Botoşani	XI	80,12	Botoşani	XI	80,08	*increase*
	Constanţa	V	51,69	Brăila	XVII	50,16	Dolj	XVII	54,88	*increase*
	Covasna	XI	67,26	Cluj	XVI	78,83	Galaţi	XV	58,5	*decrease*
	Galaţi	XV	90,19	Covasna	XI	56,03	Iaşi	XVI	60,84	*increase*
	Mehedinţi	XVII	52,52	Galaţi	XV	75,37	Olt	XV	53,75	*decrease*
	Olt	XV	53,88	Mehedinţi	XVII	67,56	Sălaj	XV	62,86	*decrease*
	Sălaj	XV	64,03	Tulcea	XVII	74,79	Suceava	IX	56,9	*increase*
	Tulcea	XVII	61,91	Vrancea	XI	77,88	Tulcea	XVII	69,14	*increase*
	Vrancea	XI	84,13				Vrancea	XI	74,17	*decrease*
No. counties	11			10			11			

Source: own processing of the authors

[6] Section IX - Wood, charcoal and wood articles; cork and cork articles; vegetal fibre plaids or basketry.

[7] The analysis of regional specialisation presented in Tables 7 and 8 was realised based on the numebering of products' categories in accordance with the Combined Nomenclature (EC Regulation no 2658/87) which provides for the common classification within the foreign trade statistics of the European Union (according to the Common Customs Tariff). .

B. Medium-high specialisation degree (40-50% of the section's export in total county export) – The counties which enter into this category maintain, to a very high share, the structure on categories of exported products which is found for those with high export specialisation presented above. It should be noticed that, in this category, the number of counties registered a growth trend (in the year 2013 as compared with the year 2008) which shows a trend of redirecting the export activities to products of a medium-high technological level, basic metals and basic metals articles' exports (XV) but also a turnaround of the foreign market for textile articles that stimulates the appetite for exports of some counties (Table 8).

Table 8: Medium-high specialisation degree of exports (between 40 -50% of the section's export in total county export)

Medium-high specialisation degree of exports	County	CN	2008	County	CN	2009	County	CN	2013	TREND OF SPECIASLISATION (2013 against 2008)
	Bistriţa Năsăud	XVI	48,36	Alba	IX	43,76	Alba	IX	49,11	increase
	Călăraşi	XV	43,2	Constanţa	V	41,46	Bihor	XVI	48,03	decrease
	Dâmboviţa	XVI	44,25	Dâmboviţa	XVI	45,33	Brăila	XVII	48,69	decrease
	Dolj	XVI	49,08	Dolj	XVI	42,42	Caraş Severin	XVI	47,73	increase
	Gorj	VII	45,43	Giurgiu	XVI	45,85	Constanţa	V	48,65	increase
	Harghita	XI	45,01	Harghita	XI	42,1	Covasna	XI	43,6	decrease
	Ialomiţa	XI	40,91	Ilfov	IV	42,06	Dâmboviţa	XVI	44,09	decrease
	Neamţ	XV	41,79	Maramureş	XX	41,55	Giurgiu	XV	43,45	increase
	Timiş	XVI	41,51	Olt	XV	44,32	Mehedinţi	XX	49,62	decrease
	Vâlcea	VII	43,86	Prahova	XVI	40,32	Neamţ	XI	41,25	decrease
	Vaslui	XI	40,03	Sălaj	XV	45,38	Sibiu	XVI	46,58	increase
				Sibiu	XVI	46,96	Teleorman	XVI	48,11	increase
				Teleorman	XVI	40,49	Vaslui	XI	45,21	increase
No. counties	**11**			**14**			**14**			

Source: own processing of the authors

C. Medium-low specialisation degree – The counties with a medium-low specialisation degree of the exports are concentrated in three large sections: XV-XVI-XVII but there are also other export options oriented on fields such as: wood, charcoal (Alba), textiles-clothing (Bacau, Iasi, Suceava, Caras-Severin, Teleorman, Buzau), foodstuff (Ilfov), food fats and oils (Ialomita). In this category, as a rule, the counties have two or more specialisations in close relationships (for instance, section XVI with XVII). The trend in this category is of a diminishing number of counties, but also of the effective weight registered (in the year 2013 as compared with 2008) (Annex 1).

D. Low specialisation degree of export is presented in Annex 2.

As result of the performed analysis, the following aspects were identified:

✓ Sections XVI and XVII have the highest potential of endogenous development, because they have as basis activities within the car-building industry, which is an industry with a relatively high value added and propagation potential (upwards and downwards) from and towards the other activities of the national economy. This relationship with other activities means also a high clustering potential;

✓ Sections I and II are the less relevant categories for the regional development level in Romania, because the endogenous growth is supported, mainly, by the intrinsic potential of the activities, the *spillover* effects being relatively low;
✓ Sections IX, X XI have the lowest potential of endogenous growth from the viewpoint of the clustering impact an of the propagation effects and, as a rule, are characteristic to the counties with a relatively low development level (for instance, the specialisation of exports aiming to the sectors like leather, textiles, footwear is based on the import of products and on cheap labour force);
✓ Section XX constitutes, in particular for the counties in the northern Transylvania, but also for other counties, a germinating premise for clustering and potentiating certain activity sectors after some exogenous factors were endogenously stimulated previously, such as technology, machinery and equipment imports, and in more general terms FDI investments and investments from high-tech fields of technological progress.
✓ Section V represents a factor with a considerable potential for supporting regional or local endogenous growth This factor can be capitalised under the conditions in which at regional/local level exists the capacity for absorbing the domestic or foreign capital, in view of continuing the processing of mineral raw materials or of semi-fabricates obtained from the respective raw materials with a high incorporation degree of science and technology propagation.

Also, the analysis of the constant structures' evolution for the first three export sections with the highest weight indicated that most counties had a high constancy degree of the structure for the first three export sections, (over 50% from total export on county), these being: Alba, Arges, Bacau, Bihor, Bistrita Nasaud, Botosani, Braila, Brasov, Calarasi, Cluj, Constanța, Covasna, Dâmbovița, Galați, Harghita, Hunedoara, Ialomița, Ilfov, Maramureș, Mureș, Neamț, Olt, Prahova, Sălaj, Sibiu, Teleorman, Timiș, Tulcea, Vaslui (Table 9).

Table 9: Evolution of structures' constancy on the first three export sections in the years 2008, 2009, 2013

Category	Counties	Total
Constant structures[x)]	Argeş (XVII; **XVI**; XX); Bistriţa Năsăud (**XVI;** XI; XVII); Braşov (**XVI**; XVII, XV); Cluj (**XVI;** XV; XI); Galaţi (XV; XVII; **XVI**) ; Harghita (IX; XX; XI); Dolj (XVII; **XVI**; XI); Mun. București (**XVI**; II; V); Neamţ (XI; XV; IX); Prahova (**XVI**; V; XI); Sălaj (XV; XI; XX); Vrancea (XI; IX; **XVI**); Cluj (**XVI**; XV; XI); Vaslui (XI; **XVI**; XII); Iași (**XVI**; XV; XI); Vâlcea (XV; VII; VI)	16 counties
Weak modified structures[xx)]	Arad (XVII; XVI); Alba (IX; XVI); Bacău (**XI**; IX); Brăila (XVII; **XI**); Botoșani (**XI,** XVII); Buzău (**XI;** XV); Caraş Severin (XVI; **XI)**; Călărași (XV, II); Constanţa (V; XVII); Covasna (**XI;** XVI); Dâmboviţa (XVI; XV); Hunedoara (XVI, **XI)**; Giurgiu (XV; XVI); Gorj (VII; **XI**); Ilfov (IV; XVI); Maramureş (XVI; XX); Mureş (VI; **XI**); Olt (XV; VII); Sibiu (XVI; **XI)**; Teleorman (XVI; **XI)**; Timiş (XVI; XII); Tulcea (XVII; **XI**)	22 counties
Strong modified structures[xxx)]	Bihor (XI); Giurgiu (XVI); Ialomiţa (XI); Mehedinţi (XVII)	4 counties

Note: x) constant structures - three sections present in the first three, for analyzed period; xx) weak modified structures - two sections present in the first three, for analyzed period; x xx) strong modified structures – one section present in the first three, for analyzed period.

Source: Data processing Annex 3

Analysis of structure constancy for the first three sections with the largest share in exports revealed three categories of counties:

- *Counties with constant structures and three sections present in the first three, for entire analyzed period* (Argeș, Bistrița Năsăud, Brașov, Cluj etc.); it is notice that, in most of counties, the XVI section (machinery, electrical equipment etc.) represent a common structure to export resilience, supporting the idea presented throughout the research, namely that this sector has a high endogenous potential, based on industrial products and processing of intermediate goods, direct or indirect valued on foreign market, with a high resilience degree to the crises;
- *Counties with weak modified structures and two sections present in the first three, for entire analyzed period* (Arad, Alba, Brăila, Buzău etc.); in this category, the most frequent section is XI (textiles and articles thereof), sector with low resilience to crisis, but with the important capacity of endogenous growth;
- *Counties with strong modified structures and one section present in the first three, for entire period, another sections changing their position* (Bihor, Giurgiu, Ialomița și Mehedinți). The counties presented in this group have low endogenous growth potential, limited development ability determined by poor resources (natural, human etc.) and a weak export recovery.

2.3. Exports' specialisation profile, on counties

In the following, we shall analyse the exports' specialisation profile, based on the contribution of the exports to total export of the county (in decreasing order), in the year 2013. Thus, three categories of export profiles were identified: *profile 1* is given by the sections with the highest weight in export (irrespective of the weight size); *profile 2 and profile 3* following in decreasing order.

From the analysis of the data presented in Table 10 with respect to the export specialisation profile, resulted the following aspects:

a. ***Profile 1 of counties specialisation*** for export consists of the sections that have the most important weights in total export. This profile differs from one county to another, constituting an essential element of the export specialisation.

Table 10: Profile 1 of counties' export specialisations (the first highest weight of the section in the total export of the county), 2013

	Section	Section denomination	Counties
	IV	Foodstuff, beverages, alcoholic drinks and vinegar; tobacco and processed tobacco substituents	Ilfov (27.04%)
	V	Mineral products	Constanța (48.65%)
	VI	Chemical industry and related industries' products	Mureș (26.01%)
	VII	Plastics and plastic articles; rubber and rubber products	Gorj (36.7%)
PROFILE 1	IX	Wood, charcoal, and wood articles; cork and cork articles, vegetal fibre plaiting and basketry	Alba (49.11%), Suceava (56.9%)

	XI	Textiles and textile articles	Bacău (29.72%), Botoşani (80.08%), Buzău (25.78%), Covasna (43,6%), Harghita (33.58%), Ialomiţa (2.84%), Neamţ (41.25%), Vaslui (45.21%), Vrancea (74.17%)
	XV	Basic metals and basic metal articles	Călăraşi (37.63%), Galaţi (58.15%), Giurgiu (43.45%), Sălaj (62.86%), Vâlcea (21.15%)
	XVI	Machinery and devices, electric equipment and components; sound recording and reproduction devices, television image and sound recording and reproduction devices, and spare parts and components thereof	Bihor (48.03%), Bistriţa (53%), Braşov (30.93%), Caraş Severin (47.73%), Cluj (28.83%), Hunedoara (43.3%), Iaşi (60.84%) Mun. Bucureşti (26.34%), Prahova (36.87%), Satu Mare (24.31%), Sibiu (46.58%), Teleorman (48.11%), Timiş (39.77%), Dâmboviţa (44.09%)
	XX	Wares and various products	Maramureş (35.96%)
	99	Other wares	Mehedinţi (49.62%)

Source: own processing of the authors

b. ***Profile 2 of specialisation*** for export represents the export products with a lower weight than profile 1 (place 2 in the exports' hierarchy) and which have smaller importance for the exports' structure, both with respect to maintaining the weight, but also its increase or decrease (Table 11).

Table 1: Profile 2 of counties' export specialisation (the second highest weight of the section in total export of the county)

	Section	**Section Denomination**	**Counties**
PROFILE 2	I	Live animals and animal products	Botoşani (4.52%)
	II	Vegetal products	Buzău (19.15%), Călăraşi (27.69%), Constanţa (17.02%), Mun. Bucureşti (18.27%)
	IV	Foodstuff, beverages, alcoholic drinks and vinegar; tobacco and tobacco substituent	Ialomiţa (23.11%)
	V	Mineral products	Olt (27.32%)
	VII	Plastics and plastic articles; rubber and rubber articles	Ilfov (13.43%), Olt (31.29%), Satu Mare (22.86%), Timiş (14.37%), Vâlcea (19.34%)
	XI	Textiles and textile articles	Bistriţa Năsăud (18.76%), Brăila (23.51%), Hunedoara (12.8%), Sălaj (16.65%), Teleorman (19.56%), Tulcea (10,46%)
	XII	Footwear, hats, umbrellas, sun-umbrellas, walking sticks, whips, riding crops and parts thereof; feathers and prepared down; artificial flowers and human hair articles	Bihor (18.9%), Braşov (26.80%),
	XV	Basic metals and basic metal articles	Cluj (14,01%), Dâmboviţa (24,06%), Iaşi (12,5%), Neamţ (30,85%)
	XVII	Vehicles, aircrafts, vessels, and auxiliary transportation equipment	Caraş Severin (27,65%), Galaţi (27,91%), Mehedinţi (14,94%), Sibiu (17,33%)
	XX	Wares and various products	Harghita (18.46%)

Source: own processing of the authors

c. ***Profile 3 of specialisation*** for exports takes a place of lower importance in the export specialisation of the counties, but which, in the future can have an important impact depending on the multitude of conjectural factors (demand, supply, market conditions, price, etc.) (Table 12).

Tabelul 12: Profile 3 of counties' specialisation to export (the third highest weight of the section in total export of the county)

	Section	Section Denomination	Counties
PROFILE 3	I	Live animals and animal products	Brăila (9.7%), Covasna (13.7%)
	II	Vegetal products	Gorj (13.04%), Ialomița (14.62%), Tulcea (6.73%)
	IV	Foodstuff, beverages, alcoholic drinks and vinegar; tobacco and tobacco substituents	Teleorman (16.12%)
	V	Mineral products	Mun. Bucureşti (10.61%)
	VI	Chemical industry and related industries products	Vâlcea (16.19%)
	IX	Wood, charcoal, and wood articles; cork and cork articles, vegetal fibre plaiting and basketry	Harghita (17.13%), Maramureş (8.83%), Neamț (11.26%)
	X	Wood pulp or other pulp fibre materials; waste paper or cardboard; paper and cardboard and articles thereof	Suceava (6.79%)
	XI	Textiles and textile articles	Caraş Severin (7.55%), Cluj (9.97%), Dâmbovița (9.22%), Dolj (6,21%), Giurgiu (16.69%), Iași (9,54%), Mureş (11.09%), Olt (7.04%), Prahova (8.41%), Sibiu (8.27%)
	XII	Footwear, hats, umbrellas, sun-umbrellas, walking sticks, whips, riding crops and parts thereof; feathers and prepared down; artificial flowers and human hair articles	Vaslui (13.50%)
	XIII	Stone, plaster, cement, asbestos, mica and similar materials' products; ceramic products, glass and glass articles;	Călărași (10.38%)
	XV	Basic metals and basic metal articles	Arad (12.47%), Braşov (9.81%), Buzău (15.25%), Hunedoara (8.63%)
	XVI	Machinery and devices, electric equipment and components; sound recording and reproduction devices, television image and sound recording and reproduction devices, and spare parts and components thereof	Galați (4.93%), Ilfov (11.64%), Mehedinți (11.19%), Vrancea (3.56%)
	XVII	Vehicles, aircrafts, vessels and auxiliary transportation equipment	Bacău (10.15%), Bistrița Năsăud (7.62%), Botoşani (3.54%), Constanța (11.5%), Timiş (9.07%)
	XX	Wares and other products	Argeş (5,7%), Bihor (6,71%), Sălaj (6,52%), Satu Mare (12,74%)

Source: own processing of the authors

In Table 13 are presented the counties and their participation to the national import, in the years 2009 and 2013. It can be seen that the Bucharest municipality is the main importer of the country, with a decreasing trend of its weight at national level (from 33.5% in the year 2009 to 29.3% in the year 2013). The second place, with a weight between 5 to 6% from the national total is held by the same counties (Ilfov, Constanta, Timis, Arges), the exception being represented by county Cluj for which the weight decreased to 3.12%. The majority of counties are placed in the category under 1% (25 counties in the year 2013, as compared with 27 counties in the year 2009) (Table 13).

Table 13 - Imports' evolution – in the years 2009 and 2013 (% in total export per county)

Year 2009		Year 2013	
Category I. weight 33% - 1 county	Bucharest Municipality (33.55%)	Category I weight 29.3% - 1 county	Bucharest Municipality (29.3%)
Category II-a weight from 6% to 5%: - 5 counties	Ilfov (6.43%); Constanţa (5.90%); Timiş (5.84%); Argeş (5.37%); Cluj (5.19%)	Category II-a weight from 6% to 5%: - 4 counties	Ilfov (6.82%); Constanţa (5.51%); Timiş (6.80%); Argeş (6.347%)
Category III weight from 4,99% to 2% - 5 counties	Prahova (4.64%); Braşov (3.53%); Arad (3.07%); Sibiu (2.86%); Bihor (2.64%)	Category III weight from 4.99% to 2% - 6 counties	Prahova (4.83%); Arad (4%); Braşov (3.83%); Bihor (3.45%); Sibiu (3.29%), Cluj (3.12%)
Category IV weight under 2% to 1% - 4 counties	Galaţi (1.13%); Satu Mare (1.61%); Mureş (1.58%); Maramureş (1.08%)	Category IV weight under 2% to 1% - 6 counties	Galaţi (1.69%); Satu Mare (1,43%); Mureş (1.64%); Dolj (2.02%); Iaşi (1,05%); Maramureş (1.21%)
Category V weight under 1% - 27 counties	Buzău (0.98%); Iaşi (0.91%); Olt (0,88%); Hunedoara (0.84%); Dolj (0.83%); Bistriţa Năsăud (0.80%); Alba (0.78%); Bacău (0.74%); Harghita (0.73%); Dâmboviţa (0.73%); Neamţ (0.62%); Vâlcea (0.60%); Covasna (0.59%); Suceava (0.52%); Sălaj (0.52%); Tulcea (0.46%); Călăraşi (0.40%); Botoşani (0.39%); Giurgiu (0,39%); Brăila (0.34%); Vrancea (0.28%); Ialomiţa (0.25%); Vaslui (0,24%); Mehedinţi (0,22%); Caraş Severin (0,20%); Teleorman (0,17%); Gorj (0,15%).	Category V weight 1% - 25 counties	Buzău (0,94%); Iaşi (0,91%); Olt (0,98%); Hunedoara (0,91%); Dolj (0,83%); Bistriţa Năsăud (0,89%); Alba (0,94%); Bacău (0,74%); Harghita (0,57%); Dâmboviţa (0,83%); Neamţ (0,52%); Vâlcea (0,40%); Covasna (0,56%); Suceava (0,77%); Sălaj (0,43%); Tulcea (0,49%); Călăraşi (0,41%); Botoşani (0,38%); Giurgiu (0,26%); Brăila (0,42%); Vrancea (0,33%); Ialomiţa (0,32%); Vaslui (0,19%); Mehedinţi (0,15%); Caraş Severin (0,28%); Teleorman (0,25%); Gorj (0,10%).

Source: own processing of the authors

In the year 2013, strong import specialisation had the counties: Botoşani - 70,3% (CN XI); Constanța 76,78% (CN- V); Mehedinți – 60,69% (other wares). In the year 2008, a high import specialisation was reported by the counties: Botoşani (60,66% - CN XI), Constanța (65,13%, CN –V), Galați (53,84%, CN– V), Giurgiu (66,36%, CN – XVI), Sibiu (56%, CN-V), Suceava (56%, CN - XVI). And, in the year 2009 the same specialisation structure existed: Botoşani – 64,2% (CN – XI), Cluj – 57,71% (CN – XVI), Constanța – 55,68% (CN – V), Giurgiu – 59,75% (CN – XVI), Tulcea – 50,39% (CN – XVI).

3. Conclusions

The contribution of foreign trade to endogenous regional economic development can be approached theoretically but also practically from the viewpoint of its differentiation on export and import activities. But, if the export of goods and services, depending on their competitiveness and scientointensive level presents a particular interest with respect to the export potential and economic performances, the import can be a factor for shaping and strengthening the endogenous elements of regional economic growth, in particular by assimilating and improving modern technologies and installations, at the level of the domestic/local or regional producers.

Between export and import we can consider that a bi-univocal link exists at regional level, which can be captured by analysing the regional trade of balance in the following instances (Annex 3):

- a positive regional trade of balance can mean an activity that generates competitive goods and services at international level, when these refer to high-tech industries. To the contrary, the same positive balance which is based on exports of raw materials and semi-fabricates under the conditions of low imports could mean an unfavourable situation for endogenous growth, supported by the theory of the expansionist pauperisation growth. The counties with a positive trade of balance maintained for the three years of analysis (2008, 2011 and 2013) are: Argeş, Buzău, Hunedoara, Bistriţa Năsăud, Tulcea, Caraș Severin, Teleorman, their majority being exporters, mainly, of raw materials or products with a low manufacturing degree;
- under the conditions of a deficit balance of trade, the endogenous development based on a high competitiveness level can be promoted by major imports of high-tech, assimilated locally by technological transfer. The counties with a negative trade of balance by concerted policies at macro-economic or regional level would have to strive for diminishing this commercial deficit and, as much as possible, for their positioning from the immediate or remote future perspective. The counties with a negative balance of trade for all the analysed years (2008, 2011 and 2013) are : Bucharest municipality, Constanța, Ilfov, Cluj and Bacău;
- the third category aims at the magnitude of the balance of trade and refers to the quasi-equilibrium between export and import which, in a general approach, presupposes that the region covers foreign exchange expenditures with cashing from exports. This state of quasi-equilibrium, which is often regarded as optimum, under the conditions of a poorly developed region presupposes the creation of a surplus for the balance of trade, that is, the use of imports for supporting growth in advance of exports. Among the counties that are circumscribed to this category we can remind Brașov, Covasna, Botoșani, Gorj, Mehedinți etc.

In conclusion, in accordance with the theory of international commerce, the nature of the products for which the regional/local specialisation is outlined presents a major importance, the comparative advantage showing in time a dynamic character.

In Romania, the export specialisation is, to a large extent, supported by products from the sections XVI and XVII next to basic products (basic metals, live animals, wood, charcoal, etc.) which are less manufactured and capital goods. The highest potential of endogeneity is presented by the exports in sections XVI and XVII, as these have a relatively high value added and a propagation character from and towards the other activities and sectors of activity. This specialisation depends to a very large extent on the local advantages provided by some counties (low costs for labour force, raw materials and materials, human capital, etc.). Also, sections XVI and XVII include, to a large extent, intermediary products (spare parts, components, sub-assemblies, etc.) that can be exported in the origin country of the company in order to be used to obtain the finished product. These final products can be capitalised either locally (in the country of origin) or exported on the international markets, generating another form of specialisation of the trade: on stages of production.

Taking into account the local specialisation profile of export, in Romania, is found that counties with an endogenous potential based on important natural resources are specialised on basic products (which are, as a rule, intensive with respect to natural resources). In turn, counties that have a high-skilled labour force are specialised in the export of spare parts, sub-assemblies and on advanced production technologies.

According to *Romania's Export Strategy for the period 2014-2020* (document approved by the Government in the year 2014, June[8]), regional specialisation must be a "smart" one, based on clusters, as follows:

A. Region Bucharest-Ilfov: Electronics-Mechatronics; Machinery and equipment-agricultural machines; Textiles- Technical textiles,
B. Region North-East: Textiles – Technical textiles; Health,
C. Region North-West: Geo-thermal energy; Furniture; Health,
D. Region South Muntenia: Car industry- research,
E. Region South-West: Tourism- the Danube; car industry,
F. Region South-East: Smart logistics (Constanta Shipyard),
G. Centre Region: Energy- Biomass,
H. West region: Agro Food- Biotechnology; Energy- Renewable energy (solar); IT- IT solutions.

In the Export Strategy is also mentioned that the sectors with high endogenous potential based on export are the following: rubber products, cars and car accessories, electric and electro-technical machinery and devices; IT; furniture. To these are added the sectors with average specialisation, but which can be counted on: foodstuff production, wine and alcoholic beverages, manufactured textile products, chemical products and fertilizers, vessels and components.

An important place in endogenous regional growth is held both by future fields (renewable, organic products, logistics, multisectoral intelligent specializations) and foreign direct investments directed towards export. To this end, Romania must improve the general business climate, to realize major investments in infrastructure and to render efficient the administrative system, to pursue better and efficient absorption of European funds, a coherent budgetary planning, etc.

Moreover, in recent reports and thematic studies for sustaining the Romania's Spatial Development Strategy (2014, p. 56) it is revealed the existence of geographic or metropolitan areas specialized in export and others with a wide range of exported products.

But, overall, it is highlighted the relatively low degree of processing the exported products in most analyzed territories, which involves paying a special attention to measures of promoting the stimulative policies for increasing the added value of exported products, according to the economic profile of each type of territory, emphasizing on valorization and endogenous creation of comparative/competitive advantages in relation to the evolutions of international context.

[8] http://cursdeguvernare.ro/wp-content/uploads/2014/06/SNE_2014_2020.pdf

Annex 1: Counties with a low- medium specialisation degree (between 20% and 40% of the section's export in total county export)

County	NC	2008	County	NC	2009	County	NC	2013
Alba	IX	38.5	Arad	XVI	32.46	Arad	XVII	31.94
Arad	XVI	31.73	Arad	XVII	22.7	Arad	XVI	26.07
Arad	XVII	24.15	Argeş	XVI	20.43	Bacău	XI	29.72
Argeş	XVI	29.63	Bacău	XI	35.29	Brăila	XI	23.51
Bacău	XI	29.91	Bihor	XII	31.82	Braşov	XVI	30.93
Bihor	XII	32.88	Bihor	XVI	30.12	Braşov	XVII	26.8
Bihor	XVI	33.47	Bistriţa Năsăud	XI	21.22	Buzău	XI	25.78
Bistriţa Năsăud	XI	23.32	Brăila	XI	26.64	Călăraşi	XV	37.63
Brăila	XVII	34.03	Braşov	XVI	27.97	Călăraş	II	27.69
Brăila	XI	33.95	Braşov	XVII	25.76	Caraş Severin	XVII	27.65
Braşov	XVI	29.4	Buzău	XI	24.2	Cluj	XVI	28.83
Braşov	XVII	28.09	Buzău	II	24.18	Covasna	XVI	23.52
Buzău	XV	33.25	Călăraşi	XV	31.3	Dâmboviţa	XV	24.06
Buzău	XI	30.89	Călăraş	II	27.94	Dolj	XVI	27.26
Caraş Severin	XI	31.01	Caraş Severin	XI	21.82	Galaţi	XVII	27.91
Caraş Severin	XVI	21.88	Constanţa	XVII	28.28	Gorj	VII	36.7
Caraş Severin	XV	21.2	Dâmboviţa	XV	26.63	Harghita	XI	33.58
Dâmboviţa	XV	30.18	Dolj	XI	27.93	Ialomiţa	XI	24.89
Dolj	XI	20.65	Gorj	XVI	31.01	Ialomiţa	IV	23.11
Giurgiu	XV	36.18	Gorj	VII	29.29	Ilfov	IV	27.04
Hunedoara	XVI	36.17	Hunedoara	XVI	39.76	Maramureş	XX	35.96
Ialomiţa	III	29	Ialomiţa	XI	26.46	Maramureş	XVI	30.08
Iaşi	XV	20.18	Ialomiţa	III	21.92	Municipiul Bucureşti	XVI	26.34
Iaşi	XI	20.08	Iaşi	XVI	34.94	Mureş	VI	26.01
Ilfov	IV	38.8	Iaşi	XI	20.99	Neamţ	XV	30.85
Maramureş	XX	37.05	Maramureş	XVI	22.35	Olt	VII	31.29
Maramureş	XVI	30.4				Prahova	XVI	36.87
Mehedinţi	XV	26.72	Mun. Bucureşti	XVI	29.09	Prahova	V	27.32
Municipiul Bucureşti	V	22.16	Mureş	VI	25.16	Satu Mare	XVI	24.31
Municipiul Bucureşti	XVI	22.07	Neamţ	XI	36.3	Satu Mare	VII	22.86
Mureş	VI	38.8	Neamţ	XV	21.9	Timiş	XVI	39.77
Neamţ	XI	30.68	Olt	XVII	24.25	Vâlcea	XV	21.15
Olt	XVII	20.95	Prahova	V	26.21	Vaslui	XVI	22.76
Prahova	XVI	36.05	Sălaj	XI	22.02			
Prahova	V	34.35	Satu Mare	XVI	33.77			
Satu Mare	XVI	39.34	Sibiu	XI	20.29			
Sibiu	XVI	38.46	Suceava	IX	37.93			
Suceava	XI	24.76	Suceava	XI	20.19			
Teleorman	XVI	37.76	Teleorman	XI	25.87			
Teleorman	XI	24.3	Timiş	XVI	35.35			

Teleorman	VI	20.76	Vâlcea	VII	36.01			
Vâlcea	VI	26.39	Vâlcea	VI	22.15			
Vaslui	XVI	35.68	Vaslui	XI	39.72			
			Vaslui	XVI	27.75			

Source: own processing of the authors after *Romania's Commercial Exchanges in the period* 1.01. – 31.12.2012 and in the period 1.01.- 31.12.2013. Ministry of Economy. Department of Foreign Trade and International Relations

Annex 2: Counties with a low specialisation degree (under 20% of total export of county)

County	NC	2008	County	NC	2009	County	NC	2013
Alba	XVI	12.76	Alba	XVI	11.98	Alba	XVI	11.66
Alba	XI	9.05	Alba	XII	7.25	Alba	XII	5.04
Arad	XI	15.08	Arad	XI	9.17	Arad	XV	12.47
Argeş	XX	4.05	Argeş	XX	4.11	Argeş	XX	5.78
Bacău	VI	12.94	Bacău	IX	13.04	Bacău	IX	19.49
Bacău	IX	12.05	Bacău	XVI	12.4	Bacău	XVII	10.5
Bihor	XI	11.46	Bihor	XI	10.45	Bihor	XI	5.83
Bistriţa Năsăud	XVII	9.94	Bistriţa Năsăud	XVII	6.07	Bistriţa Năsăud	XVII	7.62
Botoşani	XVII	7.23	Botoşani	XII	6.54	Botoşani	I	4.52
Botoşani	XX	3.47	Botoşani	XX	4.54	Botoşani	XVII	3.54
Brăila	XV	13.66	Brăila	XV	5.87	Brăila	I	9.7
Braşov	XV	11.86	Braşov	XV	8.84	Braşov	XV	9.81
Buzău	XVI	19.12	Buzău	XV	17.21	Buzău	XV	15.25
Călăraş	XIII	15.55	Călăraş	XI	11.71	Călăraş	XIII	10.38
Călăraş	II	12.32	Caraş Severin	XVI	12.76	Caraş Severin	XI	7.55
Cluj	XI	9.29	Caraş Severin	XVIII	11.8	Cluj	XV	14.01
Cluj	XV	6.92	Cluj	XI	5.26	Cluj	XI	9.97
Constanţa	XVII	19.34	Cluj	XV	4.56	Constanţa	II	17.02
Constanţa	XV	13.7	Constanţa	XV	12.33	Constanţa	XVII	11.5
Covasna	XVI	14.61	Covasna	XVI	17.64	Covasna	I	13.7
Covasna	XX	5.31	Covasna	XVII	6.12	Dâmboviţa	XI	9.22
Dâmboviţa	VI	9.94	Dâmboviţa	VI	8	Dolj	XI	6.21
Dolj	XVII	14.09	Dolj	XVII	7.74	Galaţi	XVI	4.93
Galaţi	XVII	5.56	Galaţi	XVII	14.63	Giurgiu	XVI	19.26
Galaţi	XVI	1.23	Galaţi	XVI	3.32	Giurgiu	XI	16.69
Giurgiu	XVII	19.7	Giurgiu	XVII	15.17	Gorj	XVI	16.35
Giurgiu	XVI	18.99	Giurgiu	I	11.68	Gorj	II	13.04
Gorj	XVI	15.62	Gorj	XI	14.55	Harghita	XX	18.46
Gorj	XI	13.56	Harghita	XX	18.11	Harghita	IX	17.13
Harghita	XX	17.5	Harghita	IX	15.55	Hunedoara	XVI	12.8
Harghita	IX	12.59	Hunedoara	XI	14.31	Hunedoara	XI	8.63
Hunedoara	XVII	15.67	Hunedoara	XX	8.79	Hunedoara	XV	7.5
Hunedoara	XI	7.1	Ialomiţa	II	11.78	Ialomiţa	II	14.62

Ialomiţa	VI	9.12	Iaşi	XV	15.84	Iaşi	XI	9.54
Iaşi	XVI	19.09	Ilfov	XVI	13.55	Ilfov	VII	13.43
Ilfov	V	11.27	Ilfov	XV	6.87	Ilfov	XVI	11.64
Ilfov	XVI	11.15	Maramureş	XI	13.05	Maramureş	IX	8.83
Maramureş	XI	12.41	Mehedinţi	IX	8.29	Mehedinţi	XVII	14.94
Mehedinţi	XI	6.86	Mehedinţi	XVI	7.4	Mehedinţi	XVI	11.19
Mun. Bucuresti	II	12.95	Mun. Bucureşti	V	13.94	Mun. Bucureşti	V	10.61
Mureş	XI	14.1	Mun. Bucureşti	II	12.07	Mureş	XVI	17.93
Mureş	XX	10.97	Mureş	XI	17.9	Mureş	XI	11.09
Neamţ	IX	7.65	Mureş	XVI	12.71	Neamţ	IX	11.26
Olt	VII	12.41	Neamţ	IX	9.11	Olt	XI	7.04
Prahova	XI	12.46	Olt	VII	19.3	Prahova	XI	8.41
Sălaj	XI	15.97	Prahova	XI	10.89	Sălaj	XI	16.65
Sălaj	XX	6.52	Sălaj	XX	12.91	Sălaj	XX	6.52
Satu Mare	XI	16.09	Satu Mare	VII	17.11	Satu Mare	XX	12.74
Satu Mare	VII	13.05	Satu Mare	XI	12.85	Sibiu	XVII	17.33
Sibiu	XI	17.29	Sibiu	XVII	9.64	Sibiu	XI	8.27
Sibiu	XV	15.06	Suceava	XVII	11.32	Suceava	XVI	10.85
Suceava	XX	18.4	Teleorman	I	11.28	Suceava	X	6.79
Suceava	IX	16.64	Timiş	VII	14.38	Teleorman	XI	19.56
Timiş	VII	11.97	Timiş	XVII	14.02	Teleorman	IV	16.12
Timiş	XII	11.6	Tulcea	XI	9.7	Timiş	XII	14.37
Tulcea	XV	17.13	Tulcea	XV	9.69	Timiş	XXII	9.07
Tulcea	XI	15.07	Vâlcea	XV	9.94	Tulcea	XI	10.46
Vâlcea	XV	9.22	Vaslui	XII	12.29	Tulcea	II	4.6
Vaslui	XII	13.02	Vrancea	XVII	5.84	Vâlcea	VII	19.34
Vrancea	XVI	4.7	Vrancea	XVI	4.56	Vâlcea	VI	16.19
Vrancea	IX	4.19				Vaslui	XII	13.5
						Vrancea	IX	6.26
						Vrancea	XVI	3.56

Source: own processing of the authors after *Romania's Commercial Exchanges in the period* 1.01. – 31.12.2012 and in the period 1.01.-31.12.2013. Ministry of Economy. Department of Foreign Trade and International Relations

Annex 3: Specialization of export - share of the first third sections in total export of county **(% in county total)**

Județ	CN 2008	2008	CN 2009	2009	CN 2013	2013
Alba	IX	38.5	IX	43.76	IX	49.11
Alba	XVI	12.76	XVI	11.98	XVI	11.66
Alba	XI	9.05	XII	7.25	XII	5.04
Arad	XVI	31.73	XVI	32.46	XVII	31.94
Arad	XVII	24.15	XVII	22.7	XVI	26.07
Arad	XI	15.08	XI	9.17	XV	12.47
Argeş	XVII	57	XVII	68.18	XVII	67.95
Argeş	XVI	29.63	XVI	20.43	XVI	17.06
Argeş	XX	4.05	XX	4.11	XX	5.78
Bacău	XI	29.91	XI	35.29	XI	29.72
Bacău	VI	12.94	IX	13.04	IX	19.49
Bacău	IX	12.05	XVI	12.4	XVII	10.5
Bihor	XII	32.88	XII	31.82	XVI	48.03
Bihor	XVI	33.47	XVI	30.12	XII	18.96
Bihor	XI	11.46	XI	10.45	XI	5.83
Bistriţa Năsăud	XVI	48.36	XVI	52.42	XVI	53
Bistriţa Năsăud	XI	23.32	XI	21.22	XI	18.76
Bistriţa Năsăud	XVII	9.94	XVII	6.07	XVII	7.62
Botoşani	XI	79.83	XI	80.12	XI	80.08
Botoşani	XVII	7.23	XII	6.54	I	4.52
Botoşani	XX	3.47	XX	4.54	XVII	3.54
Brăila	XVII	34.03	XVII	50.16	XVII	48.69
Brăila	XI	33.95	XI	26.64	XI	23.51
Brăila	XV	13.66	XV	5.87	I	9.7
Braşov	XVI	29.4	XVI	27.97	XVI	30.93
Braşov	XVII	28.09	XVII	25.76	XVII	26.8
Braşov	XV	11.86	XV	8.84	XV	9.81
Buzău	XV	33.25	XI	24.2	XI	25.78
Buzău	XI	30.89	II	24.18	II	19.15
Buzău	XVI	19.12	XV	17.21	XV	15.25
Călăraşi	XV	43.2	XV	31.3	XV	37.63
Călăraşi	XIII	15.55	II	27.94	II	27.69
Călăraşi	II	12.32	XI	11.71	XIII	10.38
Caraş Severin	XI	31.01	XI	21.82	XVI	47.73
Caraş Severin	XVI	21.88	XVI	12.76	XVII	27.65
Caraş Severin	XV	21.2	XVIII	11.8	XI	7.55
Cluj	XVI	61.05	XVI	78.83	XVI	28.83
Cluj	XI	9.29	XI	5.26	XV	14.01

Cluj	XV	6.92	XV	4.56	XI	9.97
Constanţa	V	51.69	V	41.46	V	48.65
Constanţa	XVII	19.34	XVII	28.28	II	17.02
Constanţa	XV	13.7	XV	12.33	XVII	11.5
Covasna	XI	67.26	XI	56.03	XI	43.6
Covasna	XVI	14.61	XVI	17.64	XVI	23.52
Covasna	XX	5.31	XVII	6.12	I	13.7
Dâmboviţa	XVI	44.25	XVI	45.33	XVI	44.09
Dâmboviţa	XV	30.18	XV	26.63	XV	24.06
Dâmboviţa	VI	9.94	VI	8	XI	9.22
Dolj	XVI	49.08	XVI	42.42	XVII	54.88
Dolj	XI	20.65	XI	27.93	XVI	27.26
Dolj	XVII	14.09	XVII	7.74	XI	6.21
Galaţi	XV	90.19	XV	75.37	XV	58.5
Galaţi	XVII	5.56	XVII	14.63	XVII	27.91
Galaţi	XVI	1.23	XVI	3.32	XVI	4.93
Giurgiu	XV	36.18	XVI	45.85	XV	43.45
Giurgiu	XVII	19.7	XVII	15.17	XVI	19.26
Giurgiu	XVI	18.99	I	11.68	XI	16.69
Gorj	VII	45.43	XVI	31.01	VII	36.7
Gorj	XVI	15.62	VII	29.29	XVI	16.35
Gorj	XI	13.56	XI	14.55	II	13.04
Harghita	XI	45.01	XI	42.1	XI	33.58
Harghita	XX	17.5	XX	18.11	XX	18.46
Harghita	IX	12.59	IX	15.55	IX	17.13
Hunedoara	XVI	36.17	XVI	39.76	XVI	12.8
Hunedoara	XVII	15.67	XI	14.31	XI	8.63
Hunedoara	XI	7.1	XX	8.79	XV	7.5
Ialomiţa	XI	40.91	XI	26.46	XI	24.89
Ialomiţa	III	29	III	21.92	IV	23.11
Ialomiţa	VI	9.12	II	11.78	II	14.62
Iaşi	XV	20.18	XVI	34.94	XVI	60.84
Iaşi	XI	20.08	XI	20.99	XV	12.5
Iaşi	XVI	19.09	XV	15.84	XI	9.54
Ilfov	IV	38.8	IV	42.06	IV	27.04
Ilfov	V	11.27	XVI	13.55	VII	13.43
Ilfov	XVI	11.15	XV	6.87	XVI	11.64
Maramureş	XX	37.05	XX	41.55	XX	35.96
Maramureş	XVI	30.4	XVI	22.35	XVI	30.08
Maramureş	XI	12.41	XI	13.05	IX	8.83
Mehedinţi	XVII	52.52	XVII	67.56	XX	49.62

Mehedinţi	XV	26.72	IX	8.29	XVII	14.94
Mehedinţi	XI	6.86	XVI	7.4	XVI	11.19
Mun. Bucureşti	V	22.16	XVI	29.09	XVI	26.34
Mun. Bucureşti	XVI	22.07	V	13.94	II	48.27
Mun. Bucureşti	II	12.95	II	12.07	V	10.61
Mureş	VI	38.8	VI	25.16	VI	26.01
Mureş	XI	14.1	XI	17.9	XVI	17.93
Mureş	XX	10.97	XVI	12.71	XI	11.09
Neamţ	XV	41.79	XI	36.3	XI	41.25
Neamţ	XI	30.68	XV	21.9	XV	30.85
Neamţ	IX	7.65	IX	9.11	IX	11.26
Olt	XV	53.88	XV	44.32	XV	53.75
Olt	XVII	20.95	XVII	24.25	VII	31.29
Olt	VII	12.41	VII	19.3	XI	7.04
Prahova	XVI	36.05	XVI	40.32	XVI	36.87
Prahova	V	34.35	V	26.21	V	27.32
Prahova	XI	12.46	XI	10.89	XI	8.41
Sălaj	XV	64.03	XV	45.38	XV	62.86
Sălaj	XI	15.97	XI	22.02	XI	16.65
Sălaj	XX	6.52	XX	12.91	XX	6.52
Satu Mare	XVI	39.34	XVI	33.77	XVI	24.31
Satu Mare	XI	16.09	VII	17.11	VII	22.86
Satu Mare	VII	13.05	XI	12.85	XX	12.74
Sibiu	XVI	38.46	XVI	46.96	XVI	46.58
Sibiu	XI	17.29	XI	20.29	XVII	17.33
Sibiu	XV	15.06	XVII	9.64	XI	8.27
Suceava	XI	24.76	IX	37.93	IX	56.9
Suceava	XX	18.4	XI	20.19	XVI	10.85
Suceava	IX	16.64	XVII	11.32	X	6.79
Teleorman	XVI	37.76	XVI	40.49	XVI	48.11
Teleorman	XI	24.3	XI	25.87	XI	19.56
Teleorman	VI	20.76	I	11.28	IV	16.12
Timiş	XVI	41.51	XVI	35.35	XVI	39.77
Timiş	VII	11.97	VII	14.38	XII	14.37
Timiş	XII	11.6	XVII	14.02	XXII	9.07
Tulcea	XVII	61.91	XVII	74.79	XVII	69.14
Tulcea	XV	17.13	XI	9.7	XI	10.46
Tulcea	XI	15.07	XV	9.69	II	4.6
Vâlcea	VII	43.86	VII	36.01	XV	21.15
Vâlcea	VI	26.39	VI	22.15	VII	19.34
Vâlcea	XV	9.22	XV	9.94	VI	16.19

Vaslui	XI	40.03	XI	39.72	XI	45.21
Vaslui	XVI	35.68	XVI	27.75	XVI	22.76
Vaslui	XII	13.02	XII	12.29	XII	13.5
Vrancea	XI	84.13	XI	77.88	XI	74.17
Vrancea	XVI	4.7	XVII	5.84	IX	6.26
Vrancea	IX	4.19	XVI	4.56	XVI	3.56

Source: own processing of the authors after *Romania's Commercial Exchanges in the period* 1.01. – 31.12.2012 and in the period 1.01.-31.12.2013. Ministry of Economy. Department of Foreign Trade and International Relations

Annex 4: Evolution of exports at county level, in Romania, in period 2008-2013 (thousand euro)

	2008	2009	2010	2011	2012	2013
Mun. Bucureşti	6420200	5311378	5883382	7632034	7854580	8528121
Argeş	2486200	2828228	3598183	4484637	4567371	5033058
Timiş	2850065	2403135	3020672	3778762	4133380	4607241
Constanţa	2088083	1566571	1767546	2381405	2326983	2417607
Arad	1455181	1232277	1655494	2125097	2132633	2488902
Bihor	948083	872225	1395324	2239977	2010625	1935000
Braşov	1225303	1162401	1594035	1836114	1962434	2281851
Sibiu	1316179	1062435	1450340	1773673	1825766	2004919
Prahova	1379281	1117370	1310410	1548833	1537295	1658523
Ilfov	656049	806052	1083106	1290551	1387227	1683819
Olt	1292152	898504	1012379	1250060	1182607	1152087
Galaţi	1394479	739745	912316	956049	955361	1001030
Alba	510781	482425	701586	888568	906930	1073057
Maramureş	600709	501243	669954	799916	855835	980731
Satu Mare	632785	495208	679682	837357	840965	771331
Cluj	986867	1460770	2381396	2211054	834171	923431
Mureş	708336	482551	609702	748391	801489	828244
Dolj	426402	269354	318939	373215	715212	1371032
Iaşi	335313	226652	384032	533306	683464	692170
Dâmboviţa	371473	273627	464800	694052	635301	560272
Bistriţa Năsăud	404327	379587	475612	549911	567105	630842
Hunedoara	507669	374259	456155	515574	557678	661424
Buzău	289737	383531	582011	601128	551004	664767
Neamţ	385030	287015	346894	418748	448524	412083
Sălaj	287341	191362	302442	397919	415163	416559
Călăraşi	278186	285661	329696	509354	412506	398525
Bacău	342052	250442	293110	348680	360927	402662
Brăila	303303	250440	284159	371576	335006	342859
Suceava	135513	170246	224119	261361	334223	411773
Vâlcea	604971	316216	393606	463272	329506	282923

Tulcea	289292	325668	324058	357354	317681	450000
Covasna	235777	204333	233271	276103	272632	306493
Harghita	245376	205584	253046	276885	268111	298521
Botoşani	204922	192919	225175	246356	252184	270599
Caraş Severin	126401	81133	138723	217252	191461	251431
Vrancea	147202	108363	135393	171215	186078	207196
Ialomiţa	117188	100138	132231	129967	182963	183409
Teleorman	138931	91052	144410	144014	163895	141375
Vaslui	164258	114127	153247	169271	154970	138970
Mehedinţi	184809	113441	109087	109383	144619	113640
Giurgiu	89907	102272	95094	115682	120250	90424
Gorj	36917	39591	41635	58776	51938	57057
Total	33603030	28759531	36566452	45092832	44768053	49125958

Source: own processing of the authors after *Romania's Commercial Exchanges in the period* 1.01. – 31.12.2012 and in the period 1.01.-31.12.2013. Ministry of Economy. Department of Foreign Trade and International Relations

Annex 5: Evolution of import at county level, in Romania, in period 2008-2013 (thousand euro)

	2008	2009	2010	2011	2012	2013
Mun. Bucureşti	21123225	13074569	14018919	16689076	16960603	16467106
Ilfov	3747837	2484050	3093903	3737986	3682258	3754194
Constanţa	3187527	2287956	2634775	3255953	3450698	3036081
Timiş	3187599	2263398	2856581	3377138	3448666	3745176
Argeş	2166703	2058367	2647556	2971828	3155965	3490072
Prahova	2516579	1801525	2098536	2289148	2281014	2660855
Bihor	1367870	1042655	1610499	2256658	2034352	1902668
Arad	1460125	1202559	1578080	1974859	1975077	2202341
Braşov	1664573	1406845	1558541	1841648	1927902	2108218
Sibiu	2629310	1097724	1419113	1577006	1735405	1814110
Cluj	2223020	2001209	2778700	2302680	1659624	1720560
Mureş	827729	605509	737560	1027024	1008597	901685
Galaţi	1670724	650294	956277	1090214	973667	929666
Satu Mare	780525	634287	764008	898645	888066	787912
Dolj	540252	325410	442855	667239	766143	1111727
Iaşi	609748	348642	498472	669161	701963	579372
Olt	562895	338094	400282	640548	629790	542546
Maramureş	555208	419441	546175	629935	625225	666032
Hunedoara	469747	325262	383180	486451	534746	498920
Buzău	380765	379738	450013	421466	497815	515080
Dâmboviţa	426818	280775	348372	419387	460145	464425
Bistriţa Năsăud	370697	309418	469982	513840	456616	491668
Alba	380313	303746	354184	438329	426307	518240
Bacău	370131	288218	348830	402418	417950	406833

Suceava	237765	212225	275042	355480	356616	422773
Harghita	401302	292755	349093	358708	351043	316591
Neamţ	407805	245790	318387	355763	350473	288828
Covasna	337733	230498	270061	335097	284015	307091
Tulcea	212615	177696	243663	277678	276979	268110
Vâlcea	353770	234751	295863	372507	262390	218460
Sălaj	366875	196868	214158	292861	253287	235644
Brăila	237355	133492	288504	394656	249521	231641
Botoşani	169600	154916	176619	216524	232605	211208
Călăraşi	235243	154389	161405	210459	210666	226454
Ialomiţa	140538	101712	131441	149703	186134	175916
Vrancea	156331	107195	128264	180497	175119	182729
Giurgiu	222268	161283	146963	203996	168625	142612
Caraş Severin	125129	81133	90966	121458	130354	154680
Teleorman	91985	69399	111173	128195	129338	138003
Vaslui	123517	93586	100947	143786	117324	105492
Mehedinţi	123995	84793	85407	99704	94022	82050
Gorj	60202	58827	46308	55539	54614	57178
Total	57223948	38720999	46429657	54831248	54581719	55080947

Source: own processing of the authors after *Romania's Commercial Exchanges in the period* 1.01. – 31.12.2012 and in the period 1.01.-31.12.2013. Ministry of Economy. Department of Foreign Trade and International Relations

Annex 6: Trade balance at the county level. 2008-2011 and 2013 (thousand euros)

County	2008		2011		2013	
	+Exc.	- Def.	+Exc.	- Def.	+Exc.	- Def.
Mun. Bucureşti		0.576		0.622		0.630
Argeş	0.167		0.313		0.232	
Timiş		0.013	0.083		0.130	
Arad		0.043	0.031		0.043	
Constanţa		0.048		0.060		0.049
Braşov	0			0.000	0.026	
Sibiu		0.017	0.041		0.029	
Bihor		0.045		0.001	0.005	
Ilfov		0.051		0.168		0.164
Prahova	0.38			0.051		0.080
Dolj		0.016		0.020	0.039	
Olt		0.121	0.126		0.092	
Alba	0		0.093		0.083	
Galaţi	0.024			0.009	0.011	
Maramureş		0.006	0.035		0.047	

Cluj		0.005		0.006		0.063
Mureş	0.068			0.019		0.006
Satu Mare	0.018			0.004		0.001
Iaşi		0.004		0.009	0.017	
Buzău	0.02		0.037		0.023	
Hunedoara	0.04		0.006		0.024	
Bistriţa Năsăud	0.131		0.007		0.021	
Dâmboviţa	0		0.057		0.014	
Tulcea	0.022		0.017		0.027	
Sălaj		0.002	0.022		0.027	
Neamţ		0.004	0.013		0.019	
Suceava	0.034			0.006		0.001
Bacău		0.001		0.004		
Călăraşi		0.011	0.062		0.026	
Brăila		0.004		0.002	0.017	
Covasna		0.006		0.004		
Harghita	0.018			0.006		0.001
Vâlcea		0.003	0.019		0.010	
Botoşani		0.004	0.006		0.009	
Caraş Severin	0.021		0.020		0.015	
Vrancea	0.032		0.000		0.004	
Ialomiţa	0			0.001	0.001	
Teleorman	0.001		0.003		0.001	
Vaslui		0.005	0.005		0.005	
Mehedinţi			0.002		0.005	
Giurgiu	0.024			0.006		0.004
Gorj		0.001	0.001			

Source: own processing of the authors after *Romania's Commercial Exchanges in the period* 1.01. – 31.12.2012 and in the period 1.01.-31.12.2013. Ministry of Economy. Department of Foreign Trade and International Relations

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