

# The Structure of the Economic Activities Carried out in Counties in Romania

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## Abstract

*The paper deals with the problem of the structural configuration of the economic activities carried out in five most economically developed and five least developed counties in Romania, trying to explain, from this point of view, the explanations of their differentiated development. The lack of the necessary statistical data prevented the analysis to be deepened to the desired extent, yet the use of the available indicators provided a sufficiently relevant image on the mentioned configuration. The analysis also included the presence and structure of the manufacturing industry in the selected counties, as the most important driving factor for their development.*

**Key words:** *economic activity; economic structure; manufacturing industry; labor power; FOB export; CIF import.*

**JEL Classification:** *L16.*

## Introduction

The endowment with resources and the attractiveness for the workforce and investments of the counties model their economic structure, framing them more or less net in the category of industrialized ones, more developed, or in the one with less developed agrarian character. The framing of counties in the two categories is not clear, since there are ones in which the industrial and agricultural activities are relatively balanced, for example Brăila and Dolj counties.

As the analysis of the structure of the economic activities carried out in all the counties of the country would occupy an excessive space that would exceed the normal dimensions of an article. As a result, we will limit it to its presentation in the first five most developed counties, in descending order (Cluj, Timiș, Constanța, Brașov and Ilfov), and the last five least developed counties, in ascending order (Giurgiu, Vaslui, Botoșani, Teleorman and Suceava), thus identified by the level of GDP / inhabitant of 2017, the last one presented by EUROSTAT. The division of the counties into developed and less developed was made according to the level of this indicator above or below the national average.

## The Structure of the Economic Activities in the Selected Counties

The insufficiency of the statistical data regarding this determinant factor of the counties' development prevented us to make an analysis capable of providing convincing quantitative and qualitative arguments. As a result, we will limit ourselves to the presentation of some aspects resulting from the county statistics that project a sufficiently edifying light on the extension of the different activities in the selected counties. The figures in the following two tables reflect the structures of economic activities in the selected counties and their productive and commercial potential expressed in the volume of international trade.

**Table 1.** Structure of economic activities in the most developed counties and their international trade

Indicators		Cluj	Timiș	Constanța	Brașov	Ilfov
Population 2019 (number of persons)		706.905	705.113	673.709	552.193	485.276
% of the workforce in the county population		36,7	35,8	27,8	35,1	33,8
Work-force by activities (%), June 2019	Number of persons, total	259.216	252.460	187.433	193.663	163.810
	Agriculture, Forestry, Fishing	0,9	2,3	2,4	2,0	1,6
	Industry, Construction	30,1	41,5	28,3	39,2	31,5
	Services	68,9	56,2	69,3	58,7	66,9
Monthly gross average earnings per activity (lei), June 2019	Agriculture, Forestry, Fishing	5501	4437	3054	4057	5234
	Industry, Construction	4620	5015	5165	4849	4857
	Services	6045	4779	4440	4718	5718
International trade (mil. euro), June - May 2019	FOB export	755,7	2776,0	983,6 <sup>a</sup>	1514,1	1148,1
	CIF import	1141,6	2366,3	1964,0 <sup>a</sup>	1367,2	3002,7
	Balance	-385,8	+ 409,6	-980,4	+ 146,9	-1854,6

Source: County Statistics Department, Monthly Statistical Bulletin various counties, June 2019

**Table 2.** Structure of economic activities in the least developed counties and their international trade

Indicators		Giurgiu	Vaslui	Botoșani	Teleorman	Suceava
Population 2019 (number of persons)			373.863	379.622	334.143	624.563
% of the workforce in the county population			15,3		17,0	18,2
Work-force by activities (%) June 2019	Agriculture, Forestry, Fishing		5,7		7,4	3,1
	Industry, Construction		33,7		33,1	31,2
	Services	Website being updated	60,5	Website being updated	59,4	65,7
Monthly gross average earnings per activity (lei) June 2019	Agriculture, Forestry, Fishing		3583		3248	5077
	Industry, Construction		3281		3364	3356
	Services		4726		4496	4484
International trade (mil. euro) January-May 2019	Fob export		57,4		73,1	222,9
	CIF import		50,3		85,0	279,9
	Balance		7,1		-11,9	-57,0

Source: County Statistics Department, Monthly Statistical Bulletin various counties, June 2019

In the least developed counties listed in the last table, the share of work force in the population of counties (on average about 17%) is much lower compared to that registered in the five most developed counties in the country (on average about 33%). The explanation is that in the first category counties, the aging of the population is more pronounced as a result of the massive migration of the inhabitants, especially of the young people, to other counties and abroad, adding to this the high share of the number of people receiving social assistance under different forms.

The profoundly negative effect of this situation is the massive shortage of labor force in relation to the indispensable necessity of ensuring a higher rate of economic growth and of reaching the more developed counties. The physical lack of workforce (expressed in number of people) combined with the low level of professional knowledge and skills that characterize a part of the existing workforce in the less developed counties, means an acute shortage of human capital that hangs hard in efforts to overrun the state of underdevelopment.

The structure of the economic activities in the selected counties is reflected by the structure of the labor force framed in these activities, as presented in the tables. The actual structure is correctly reflected by the shares of the activities in the total turnover realized by the county or, more relevant, by the respective weights in the total gross value added. As these latter indicators are not present in the county statistics, we have had to assess the structure of the economic

activities of the counties according to the labor force in them. The assessments according to this indicator are deformed by the fact that they do not reflect the large differences in labor and total factors productivity, respectively the very different capacity of the activities of generating added value. Thus, it appears from the tables that the share of labor force in the activities of Industry and Construction does not significantly differentiate the most developed counties from the least developed ones, although there are appreciable disparities known between the level of technicality and productivity of the industries of the two categories.

The same is true in the services sector which, in the developed counties, present a high share of the medium and high technology activities (information and communications technology, professional services, educational services), while in the less developed counties the main shares hold their trade, real estate transactions, public administration, etc., i.e. services with modest added value.

This last aspect is also confirmed by the average monthly gross earnings per activity, visibly higher in the activities of Industry and Construction in the more developed counties compared to the same activities in the second category counties.

However, what strongly differentiates the two categories of counties is their international trade potential, both in terms of FOB export and CIF import. Thus, the volume of exports made in the first five months of 2019 of the second most developed county, Timiș, is 48.4 times higher compared to the second least developed county, Vaslui; on import, the ratio is 47.0 / 1. In fact, Timiș County has by far the largest volume of export and import compared to the other developed counties and, what must also be appreciated, it has a surplus external trade balance, as does Vaslui County, where the positive balance is incomparably smaller. Five of the nine counties for which data were found in the monthly statistical bulletins registered negative balances of the external trade balance, three developed and two less developed counties, which proves the existence of a productive and commercial potential that, although growing, continues to be modest.

## **The Activities of the Processing Industry Present in the Selected Counties**

As the manufacturing industry is the engine of the development of any economic entity in which it is a part, it is natural to be given special attention, in the sense of highlighting its contribution to the economic growth of the respective entity, as well as the spurring effect it exerts on the other activities.

The manufacturing industry is present in all the counties, but its structure differs appreciably from one county to another: the developed ones are characterized, in general, by industrial activities, according to the CANEN terminology, with a higher level of technological intensity; the less developed counties also host such activities but with a low technology intensity, with a modest added value contribution. National statistics at country, development regions and counties levels, and EUROSTAT, do not provide detailed data on the structure of the manufacturing industry. However, this structure is reflected by that of the export of industrial products, depending on their nature and intensity relevant assessments can be made on the weight of activities in the total value of industrial production (see the following table).

**Table 3.** FOB export of goods by sections of the Combined Nomenclature and selected counties, 01/01 - 31/07/2019 (billion euros and %)

Manufacturing industry/Sections of the CN for manufacturing industry		Most developed counties					
		CJ	CT	BR	IF	BT <sup>a</sup>	SV
Manufacturing industry	Val.	1000,6	716,1	2055,3	1512,6	279,8	289,5
	%	100	100	100	100	100	100
IV. Food, beverages, tobacco	Val.	8,3	19,6	10,8	290,8	0,2	7,2
	%	0,8	2,7	0,5	19,2	0,1	2,5
V. Mineral products	Val.	3,8	543,2	15,0	10,5	0	0,6
	%	0,4	75,9	0,7	0,7	-	0,2
VI. Chemical products	Val.	14,9	5,2	14,3	86,7	0,003	0,137
	%	1,5	0,7	0,7	5,7	-	-
VII. Plastic, rubber and articles thereof	Val.	93,5	43,0	128,1	354,6	12,0	14,0
	%	9,3	6,0	6,2	23,4	0,7	4,8
VIII. Raw hides and skins, leather, furskins and articles thereof	Val.	12,0	0,373	8,4	23,0	0,081	1,1
	%	1,2	0,05	0,4	1,5	-	0,4
IX. Wood and articles of wood, excluding furniture; Wood charcoal; Cork and articles of cork; Manufactures of straw	Val.	13,4	13,8	44,9	20,4	4,2	148,9
	%	1,3	1,9	2,2	1,3	1,5	51,4
X. Pulp of wood; Paper and paperboard and articles thereof	Val.	56,5	0,012	42,0	24,6	0,166	20,5
	%	5,6	-	2,0	1,6	0,1	7,1
XI. Textiles and textiles articles	Val.	25,6	3,6	68,7	31,6	251,8	23,2
	%	2,6	0,5	3,3	2,1	90,0	8,0
XII. Footwear, headgear, umbrellas and similar articles	Val.	27,1	0,014	27,3	23,2	6,0	1,3
	%	2,7	-	1,3	1,5	2,1	0,5
XIII. Articles of stone, plaster, cement, mica or similar articles; Ceramic products; Glass and glassware	Val.	15,2	1,4	3,5	3,5	0,022	2,0
	%	1,5	0,2	0,2	0,2	-	0,7
XV. Base metals and articles of base metals	Val.	111,7	31,9	263,8	139,9	4,9	3,0
	%	11,2	4,5	12,8	9,2	1,7	1,0
XVI. Machinery and mechanical appliances; Electrical equipment; Parts thereof; Sound and image recorders and reproducers	Val.	433,3	12,2	805,5	349,4	0,883	42,0
	%	43,3	1,7	39,2	23,1	0,3	14,5
XVII. Vehicles, aircrafts, vessels and associated transport equipment	Val.	65,7	41,0	577,0	53,7	0,021	18,8
	%	6,6	5,7	28,1	3,6	-	6,5
XVIII. Optical, photo-graphic, cinemato-graphic, measuring, checking, precision, medical and surgical instruments and apparatus; Clocks and watches; Musical instruments; Parts and accessories thereof	Val.	52,3	0,121	31,8	5,5	0,012	0,204
	%	5,2	-	1,5	0,4	-	0,1

Table 3 (cont.)

<b>XX. Miscellaneous manufactured articles</b>	<b>Val.</b>	67,3	0,668	14,2	95,3	9,7	6,7
	<b>%</b>	6,7	0,1	0,7	6,3	3,5	2,3

Note: **a** –01/01 – 30/11/2017 period; **CJ** – Cluj; **CT** – Constanța; **BR** – Brașov; **IF** – Ilfov; **BT** – Botoșani; **SV** - Suceava

Source: County Statistics Department, Monthly Statistical Bulletin various counties, June 2019

The table does not include all the 10 counties selected for analysis because the websites of the counties statistical directions and their monthly bulletins have either not been updated or have been incomplete, although there probably is a standard format to be respected.

Despite the incompleteness of the available statistical data, which significantly reduces the relevance of the analysis performed, several aspects can be highlighted.

The export potential of the manufacturing industry from the most developed counties selected for analysis is much higher than the one of the least developed counties present in the table, about six times; this under the conditions in which Constanta county has a significantly lower FOB export volume compared to Brașov and Ilfov counties, and in the second category Botoșani and Suceava counties have achieved remarkable volumes.

The structure of the component activities of the manufacturing industry in the developed counties, reflected by the structure of their export by sections of the Combined Nomenclature, is visibly more balanced than that of the two less developed counties. In addition, in the first category of counties the structure of their manufacturing industry is focused, on average, on activities with medium or high technological level, generators of consistent added value (in particular sections XVI, XVII, XVIII), while in the second category dominant are the shares of industrial activities with low technological (sections IX, XI, XX).

Among the most developed counties present in the table, Brasov has by far the best export performance, these being supported in particular by those recorded in sections XV, XVI and XVII; the county has thus retained its industrial tradition, despite its drastic deindustrialization process, during which many large established companies have closed or greatly reduced their production (Steagul Roșu, Tractorul and others), and production capacities from various industrial activities were abandoned. The figures also show the specialization more or less emphasized of the counties' export, respectively of their manufacturing industry, as follows (in descending order of the volume of FOB export by sections):

- Cluj - sections XVI, XV, VII;
- Constanța - sections V (due to Rompetrol Năvodari Refinery); VII, XVII (ship production and repair);
- Brașov - sections XVI, XVII, XV;
- Ilfov - XVI, IV, XV;
- Botoșani - section XI;
- Suceava - IX, XVI.

## Conclusions

The structure of the economic activities carried out in the counties significantly influences their development potential, there being a certain proportionality between the technological level and the qualification of the labor force from the different activities, on the one hand, and the capacity of the activities to generate the added value, respectively a certain level of GDP / inhabitant, on the other hand. The scarcity of detailed statistical data prevented this proportionality from being highlighted with certain quantitative arguments. Even using less relevant indicators for establishing the structure of the economic activities carried out in the counties, it is evident that the higher weights of the Agriculture, Forestry, Fishing activities

characterize the less developed counties, and the great potential of international trade is the privilege of the developed counties.

The presence of the processing industry in the counties and its structure by component activities represent a factor with a strong influence on the economic development of the territorial units, the influence differentiation depending on the technological level of the industrial activities in which the units are specialized. The structure of the industrial activities carried out in the counties has progressively crystallized in the last century and a half, in the sense that, on the one hand, the counties that have asserted from the beginning their preponderant industrial character have constantly emphasized and consolidated it, and on the other hand, their specialization in certain activities has also deepened.

## References

1. \*\*\*, 2004. A Study on the Factors of Regional Competitiveness. A draft final for the European Commission – Directorate General Regional Policy, Cambridge Econometrics/ECORYS NEI/University of Cambridge.
2. Academia Română, 2002. *Dezvoltarea regională și integrarea europeană* (Simion, E., Iancu, A.(coord.)), Grupul de reflecție Evaluarea stării economiei naționale, ESEN – 2. Integrarea României în Uniunea Europeană, Institutul Național de Cercetări Economice, Centrul de Informare și Documentare Economică.
3. Akpinar, M., Can, Ö. and Mermercioglu, M., 2015. *Determinants of competitiveness in European regions: A test of the emerald model*, Communication presented to The 10th World Economy Research Institute's Annual Conference, Collegium of World Economy, Warsaw School of Economics, 29 June.
4. Annoni, P. and Dijkstra, L., 2013. *European Union Regional Competitiveness Index*, European Commission, Brussels.
5. Antonescu, D., 2012. Identificarea disparităților și convergenței economice regionale în UE și în România, în: Institutul Național de Cercetări Economice, *Studii Economice*. Available through [www.ince.ro](http://www.ince.ro) website.
6. Antonescu, D., 2014. *Theoretical approaches of regional development*, Munich Personal RePEc Archive, MRPA Paper No. 60524, posted 11 December.
7. Armstrong, H. and Taylor, J., 2000. *Regional Economics and Policy* (Third edition), Blackwell Publishing Inc.
8. Asheim, B., Boschma, R., and Cooke, Ph., 2011. Constructing regional advantage: Platform policies based on related variety and differentiated knowledge base, in: *Regional Studies* 45(7), pp. 893–904.
9. Banca Națională a României. *Monografii*, 2013-2019; *Monografii județe*, Colecția Județele Patriei, different editions
10. Capello, R. and Nijkam, P., (Eds.), 2009. *Handbook of Regional Growth and Development Theories*, Published by Edward Elgar Publishing Ltd.
11. Duba, W., Loewen, B., Looga, J. and Zdražil, P., 2018. Regional Development in Central-Eastern European Countries at the Beginning of the 21th Century: Path Dependence and Effects of EU Cohesion Policy, in: *Quaestiones Geographicae*, 37 (2), pp. 78-92.
12. Jordan, M.a, Chilian, N. M., Ghizdeanu, I., Andrei, D. M., 2013. *The Economic Structures in the Romanian Regions and Counties and The EU Member States. Comparative Analysis*. IPE, Research program: “Coeziunea economico-socială în România din perspectiva Strategiei Europa 2020”, pp. 50-62.
13. Jovovic, R., Draskovic, M., Delibasic, M., Jovovic, M., 2017. The concept of sustainable regional development – institutional aspects, policies and prospects, in: *Journal of International Studies*, 10(1), CSR 2017, Scientific Papers, pp. 255-266.
14. McCann, P., 2015. *The regional and urban policy of the European Union: Cohesion, results-orientation and smart specialisation*. Cheltenham: Edward Elgar.
15. McCann, P., and Ortega-Argilés, R., 2015. Smart specialization, regional growth and applications to EU cohesion policy, in: *Regional Studies*, 49(8), pp. 1291–1302.
16. Mereuță, C., 2018. *Some Microeconomic Landmarks of the Transition Process in Romania*, Economic Publishing House.

17. Sachs, J.D. and McCord, G.M., 2008. *Geography of Regional Development*, The New Palgrave Dictionary of Economics Online (edited by Steven N. Durlauf and Lawrence E. Blume), Second Edition.
18. Uniunea Europeană – FEDR, 2013. Guvernul României, Ministerul Dezvoltării Regionale și Administrației Publice. *Instrumente structurale 2007-2013. Strategia națională de dezvoltare regională 2014-2020*, 2013, Bucharest.
19. World Economic Forum. *The Global Competitiveness Report*, annual editions, Geneva.
20. Zaman, Gh., Georgescu, G. (coord.), Goschin, Z., Antonescu, D., Popa, F., 2015. *Dezvoltarea economică endogenă la nivel regional. Cazul României*, Expert Publishing House, Bucharest.