

CONTRIBUTION OF ROMANIAN SECONDARY SECTOR TO REGIONAL DEVELOPMENT

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Abstract:

In this paper, we show the contribution of the secondary sector (industry and construction) on the economic development of the regions, functional areas and the urban system in Romania. The development of economic activities of production is conditioned by certain geophysical, demographical, social and cultural characteristics. Considering that economic restructuring and privatization of industry put their mark on the evolution of the Romanian economy in recent years, it is absolutely necessary to take into account the influence of the secondary sector activities - industry and construction, to establish the development measures of Romanian regions. One more reason is that the most industrialized cities prior 1990, dependent on a single branch of industry, losing the markets for these industries, recorded high unemployment, which in terms of social, equates to a high degree of poverty.

Territorial development of the secondary sector shows large differences mainly due to natural barriers, level of accessibility to natural resources and public services of general interest. These gaps deep more economic and social problems existing in the territory.

In the secondary sector, Romania follows closely the provisions of European Union policy, in order to develop a national competitive market, integrated into the European internal market. An example: in the industrial branch, employment share is approximately equal to the European average level. In terms of productivity, in Romania, in the context of a very low level of this indicator, its value is high in the industrial sector (especially in the manufacturing sector the specific productivity is above the national average). It is estimated that after 2014, the improvement of Romania's macroeconomic stability could generate rapid growth in the secondary sector.

In Romania, industrial sector faces with problems such: the high level of resources not identified, poor promotion on domestic and foreign market, the dependence of certain areas of a single industry. Economical and social development in certain areas of Romania depends largely of industrial sector, recent restructurings with significant negative effects in these territories.

The construction sector, together with other sectors of the Romanian economy, continues to be sensitive to national economic fluctuations, according to the results achieved in recent years. Legislative and economic instability are the main factors that influence significantly the construction sector.

Key words: secondary sector, industry, construction, reorganization, development regions

JEL classification: L60, L74

1. INTRODUCTION

The current global economic crisis has had a negative effect on industrial production in Central and Eastern Europe, by default in Romania. Our country is closely following provisions of European Union policy in the secondary sector, with the aim of develop a national competitive market, integrated into the European internal market. An example is that the employment share in industry is close to the average European level. In terms of productivity, in Romania, in the context of a very low level of this indicator, its value is high in the industrial sector (especially in the manufacturing sector the specific productivity is above the national average). It is estimated that after 2014, the improvement of Romania's macroeconomic stability could generate rapid growth in the secondary sector.

2. SUBSECTORS COMPONENTS OF THE SECONDARY SECTOR

2.1. Industry

Romanian industry comprises four subsectors: mining; manufacturing industry; production and supply of electricity, thermal energy, gas, hot water and air conditioning; water supply, cleaning, waste management and remediation activities.

- **Mining** is not very important in terms of turnover, both at European and national level. Mining can confer a competitive advantage in the manufacturing industry, providing to this subsector direct raw material, without additional costs arising from the transport of other countries and long transit time. In Romania, mining generates between 5,5% (2009) and 6,5% (2008) of the total added value created by industry, construction, services and trade, well above the European average of 1,3-1,6%.

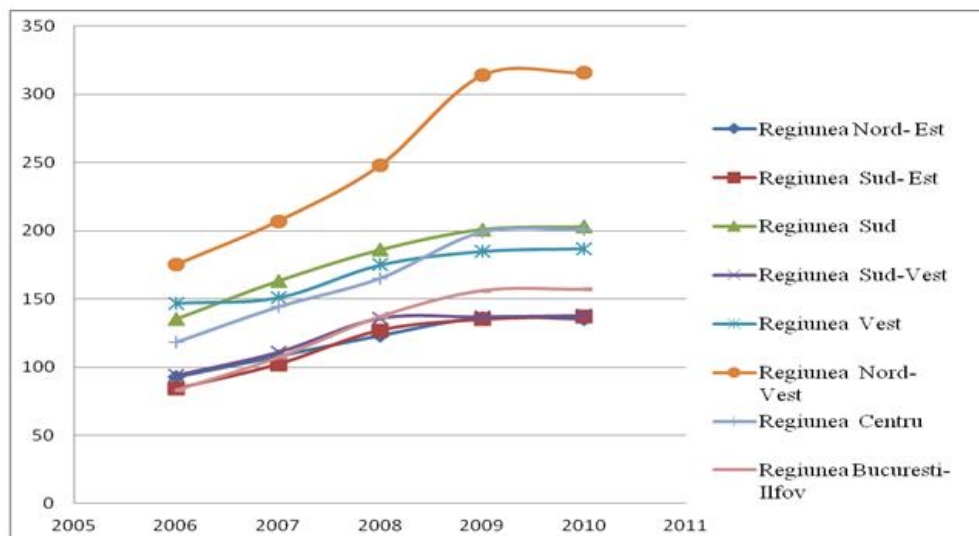


Figure 1. Evolution of local units active in mining in regions in 2006-2010

Source: NIS, Romanian Statistical Yearbook 2007-2008 data processing

The most important Romanian extractive branche is oil and natural gas extraction one, which generates 70% of turnover national level of mining. In 2012, Romania ranked fifth in oil and gas production, while dependence on imports was about 25%, which was below the European average of 50%.

Territorial distribution analysis of mining in terms of existing active local units (Figure 1), highlights North-West region with the best representation followed by South, West and Central. The few local active units of mining are in the South East and South West regions. The most obvious evolution of mining is recorded in the North West region with a growing number of local units of approximately 27% in 2009, compared with 8% for other regions. For all 8 regions there is a stagnation of the development of local units active in mining in 2010 compared with 2009.

- **Manufacturing industry** plays an important role in economic growth and the creation of jobs, being the subsector that recorded the highest number of employees both in Romania and European level. The contribution of the sector remains significant even the number of employees has declined significantly after 1990. The most important branches of Romanian manufacturing in terms of the number of employees and turnover (approx. 25%) are: food and motor vehicles industry. This situation is similar to the European Union where, in 2009, these two branches generated 24,32% of turnover and 22,02% of added value of all the manufacturing industry and have had 21,32% of total employees.

The role of these industries is steadily declining and, in the future it is expected that will lose their importance. Specialization industries is higher in Romania than in other countries. Romania is specialized in following branches (according to European studies): leather and footwear, textiles and clothing, food/beverage/tobacco, wood products and furniture and refined petroleum. The counties well developed are: Argeş, Constanţa and Cluj.

In terms of the competition structure, although labor productivity is far below the EU average, ranking of industries in Romania is similar to that of the EU. Romanian specific are the industry of non-metallic mineral products and the manufacturing industry of computers and electronic products, which have a very good productivity compared to other sectors, not founded in other states. This feature can be exploited, especially in trade relations.

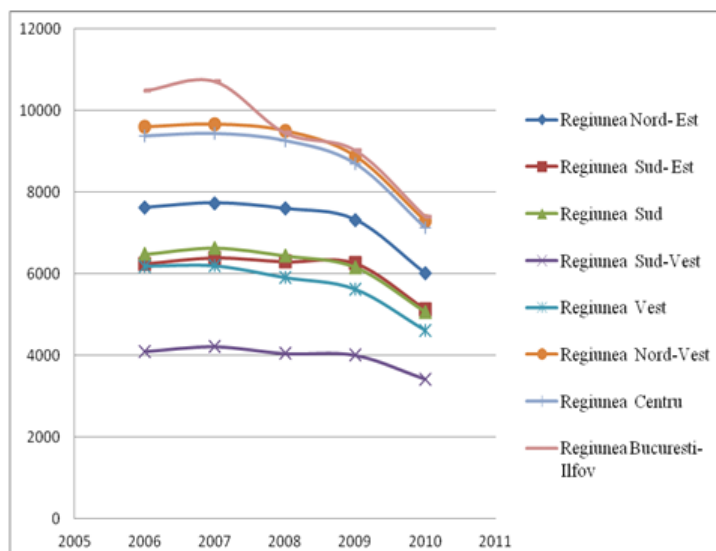


Figure 2. Evolution of local active units in manufacturing industry on regions in 2006-2010

Source: NIS, Romanian Statistical Yearbook 2007-2011 data processing

In 2006 and 2007 **Bucharest-Ilfov region** recorded the highest number of local units in manufacturing industry compared to other regions (Figure 2). The year 2008 was characterized by decreasing on number of local units by about 12% compared with previous year.

The counties with the most active local units belonging to manufacturing industry are: Bucharest, Bihor, Cluj, Braşov, Timiş, Prahova, Constanţa, Argeş, Iaşi, Maramureş, Suceava. Manufacturing industry is underrepresented in the counties of: Ialomiţa, Virginia, Călăraşi, Tulcea, Giurgiu.

- **Production and distribution of electricity, thermal energy, gas, hot water and air conditioning subsector** include supply electricity, gas, steam, hot water activity through a permanent infrastructure of power lines, pipelines, pipes. Romania's capacity to produce energy is determined by available resources, that are diversified but small in terms of quantity.

- **Water supply, sanitation, waste management and remediation activities** refers to the water supply, management (including collection, treatment and removal) of various types of wastes such as municipal solid waste or not, and the land remediation activities.

In the field of industrial activities in 2011 (Source: ONRC), the largest concentration of firms was register in major cities of the country (county capitals): Bucharest, Constanţa, Cluj, Arad, Timişoara, Oradea, Braşov, Craiova, Iaşi. A small number of industrial companies registered in counties such as: Vaslui, Brăila, Ialomiţa, Calaraşi, Mehedinţi. South West region recorded the lowest number of industrial firms, making it the least industrialized region of Romania. Also, here was recorded the weakest activity in the construction sector.

Number of industrial firms is different compared with the construction firms from one county to another. In Cluj, Ilfov, Prahova, Timiş aren't significant differences of this indicator. The most construction companies are registered in Bucharest and in counties like Giurgiu and Satu-Mare. In Harghita and Covasna counties, the number of construction companies is about 50% lower than in the industrial, respectively 40% for Caraş-Severin, Mureş, Neamţ, Suceava, Iaşi and Vrancea counties.

2.2. Constructions

Constructions can be considered one of the most dynamic subsectors of the national economy in the period 2003-2008, due to the high degree of privatization (99,7% companies with private capital in 2010). This sector register about 16,6 billion euro investments in 2010, representing about 10% of GDP, with nearly 53.000 active companies in the market. (Source: NIS, NBR, INCD URBAN-INCERC).

In the regions in 2006-2008 was an increase in the number of local units active in construction. Installing of the economic crisis in Romania has generated significant falls in the number of firms on the territory. In Bucharest-Ilfov region was recorded over time the highest number of local active units in the construction sector (Figure 3), while South-West region's situation is opposed.

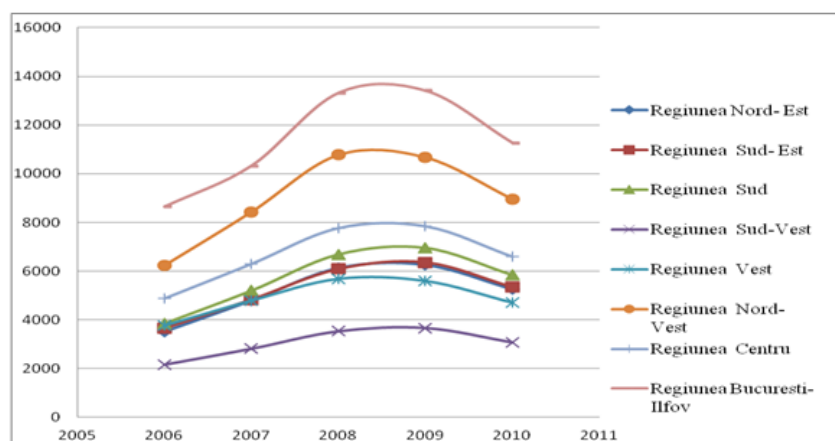


Figure 3. Evolution of local active units in construction sector in 2006-2010

Source: NIS, Romanian Statistical Yearbook 2007-2011 data processing

In terms of the number of firms that operates in construction branche, in 2011 (Source: ONRC), the highest concentration was recorded in: Bucharest, Timișoara, Cluj, Oradea, Brașov, Iași, Constanța and Ploiești (over 1.000 companies). In contrast, a very small number of firms (under 10), was registered in: Mehedinți, Dolj, Olt, Virginia, Dâmbovița, Ialomița, Călărași, Brăila and Vaslui. Moreover, in the counties of Mehedinți, Dolj, Olt, Teleorman, Ialomița, Brăila was not recorded construction activity. In terms of regions, the lowest concentration of firms in construction is in the South-West.

3. ANALYSIS OF THE SECONDARY SECTOR ON DEVELOPMENT REGIONS

In the period 1990-2000, Romania registered a difficult period, of economic decline, due to the deterioration of the main macroeconomic balances and galloping inflation. The economic restructuring process was accompanied by an appreciable restriction or closure of existing production capacities. Mining, chemical and non-ferrous metallurgy was the most affected industries. Starting with 2000-2001, the economic climate has improved. The economy resumed its growth, and the years 2006-2008 brought strengthening of economic growth. Economic and financial crisis that began in the second half of 2008 had a negative impact on the level of investments, both foreign and domestic level. Some foreign companies withdrew or reduced their presence of our country.

Areas in industrial decline are those areas where the transition process led to an important reduction in the number of jobs, especially in manufacturing and mining.

Areas where the employed population is dependent on a single branch/sub-branch of heavy industry or even a single large economic loss-enterprise are structurally fragile areas. Intensified restructuring process and withdrawal state subsidies make that in the next period these areas to transform into industrial decline areas. Examples: areas of Neamț county (North-East region), Galați and Brăila (South-East region), Prahova, Călărași, Teleorman, Dâmbovița (South Muntenia

region), Gorj (South-West Oltenia region), Hunedoara (West Region) Satu Mare (North-West region).

1. After 1990, in terms of a restructuring process of economy, the majority state capital enterprises of **South-West Oltenia region**, began to be uncompetitive. Massive industrial decline of the region has led to its transformation into a disadvantaged area, so that region could be considered "problem-area". Thus, the most economically affected area is the mining area of the coal field Gorj Motru-Rovinari. Here the dependence of mining is very high.

The main sub-sectors prevailing in the South-West Oltenia region are: mining, manufacturing and electricity, gas and water industry. The mining sector (energy coal and oil) is still an important component of the region's economy. In Gorj county are the most enterprises with extractive profile. South-West region has the main role of romanian energy due to the hydrological network and the configuration of the relief. It is the largest energy producer in Romania, due to the existence of the Iron Gates hydropower complexes (among the highest in Europe) of Mehedinti county and Lotru-Olt of Valcea county (among the largest in Romania).

2. In the **North-West region**, areas in industrial decline are: the Apuseni Mountains areas and the mountains area of the northern region of Maramures, Satu Mare and Bistrita-Nasaud counties. Counties of southern and western of the North-West region (Cluj, Bihor and Satu Mare) are traditional industrial areas that allowed the development of light industry, wood, construction machinery, characterized by a higher level of economic stability compared to other areas. Industrial specialization can be observed at county levels too, so that:

- *Bihor county* is concentrated on the light industrial activity: leather and footwear, clothing.
- in *Bistrița-Năsăud county* the activity is concentrated on automotive parts industry and mining.
- in *Cluj county*, prevails textiles industry, electrical equipment industry; leather and footwear industry, food industry; electronic equipments industry, chemical industry.
- in *Maramureș county*, due to the natural factors is predominant woodworking and furniture industry.
- in *Satu Mare county*, industrial centers are specialized in automotive parts industry
- in *Sălaj county* specialization is given by clothing industry.

3. **Central region** has a complex industrial structure with traditional branches and recognized qualified personnel. The industrial profile of the region is given by the automotive industry (Brașov) and metal processing (Brașov), chemical (Mureș), construction materials, and wood (Alba, Harghita), mining (Alba, Covasna), textile (Covasna, Harghita, Mureș, Sibiu) and food (all counties). Central Region provides over 40% of gas production in Romania.

Industry in this area, specialized in the production of intermediate goods for other sectors of the economy has been hit hard by the economic downturn registered in Romania in the 90's and of lack of investments in retooling, which led to the closure of several industrial giants. It is distinguished the basic chemical industry (Târgu Mureș, Ocna Mureș, Târnăveni), pharmaceutical industry (Brașov- Europharm, Târgu-Mureș-Aromedica), automobile oil (Brașov), superior processing of wood (Sebeș - Schweighofer), furniture industry (Târgu Mureș) and luxury clothing (St. Gheorghe, Odorhei).

4. The traditional economic camp of the **North-East region** - wood processing industry has grown significantly in recent years, not only in terms of jobs, but especially on turnover (100% more than in 2001). Increasing the share of furniture industry in total turnover highlights the region's orientation towards a higher recovery of wood. Also in this region, the textile industry has registered a tremendous growth in turnover. At county level, in 2011, the situation is as follows: in Bacău and Botoșani counties, the most local units are active in the food industry (19,6% in Bacău

and 30% in Botoșani), in Iasi county – food industry (16,3%) and textiles industry (12,78%), in Neamț county – woodworking industry (26,42%) and textiles industry (15,63%), in Suceava county - woodworking (40,29%) and food industry (16,88%) and in Vaslui county - food industry (23,46%).

5. In **South-East region**, industrial activities are concentrated mostly in large urban centers, being represented almost all subsectors. Main traditional sectors are food and furniture industries. Mechanical sector focuses also a large number of enterprises. The peak branches are: metallic construction and metallic products industries, repair, maintenance and installation of machinery and equipments and manufacture of transport vehicles, almost all marine. The shipbuilding industry, specific of this region, is almost a "cluster" in incipient form.

Shipyards on the region highlights the desirability of the Black Sea and the Danube Delta. It's about Brăila, Galați, Tulcea, Constanța, Mangalia.

In *Vrancea county*, dominant traditional industry is the clothing industry. Well represented in the county are too food and beverage manufacturing industry. Other sectors representative of this county are wood processing, clothing and metal industry and metal products industry. In Vrancea county are concentrated 11,3% of construction companies of the region.

In *Tulcea county*, the food industry is dominant. Also are relevant clothing industry, metal industry and metal products and shipbuilding industries.

In *Galati county*, stands metallic construction and metal products industries, manufacture of transport vehicles, especially shipping transport and in construction sector operates about 20% of economic agents of the region. Food and furniture industries are present in the county. Given into account that Galati county is the fourth industrial centre of the country, mining has an important share (55,6% of Romania's steel production in 2008), half of this for the export.

In *Constanta county* the leading sector is the production of ships and means of aquatic transport. The activities of the mechanical and chemical sector, of metal industry and metal products industry, rubber and plastics manufacturing are well represented too. A traditional industry in the county is the food industry. Constanta county is considered the first county of the region in terms of industrial activity, but this county concentrates the largest share of firms of the construction sector too (37,38% of all region).

Buzau county is very diversified in terms of industry. Are founded the food industry, furniture industry, road and sea means transport construction industry, electrical equipment, other machinery and equipment. In Buzau county activates more than 16% of construction companies in the region.

Braila County is distinguished by the predominant of food industry, clothing manufacturing industry, metallic construction and metal products industries. The buildings branch is underdeveloped, activating only 9% of enterprises of the region in this sector.

6. The northern part of the **Southern Region** (Argeș, Dâmbovița and Prahova counties) is characterized by a high degree of industrialization. Prahova county ranks the first place in our country in terms of industrial production. Some industrial activities survived of restructuring process and are the engine of economic growth: the extraction and processing of oil and gas, machinery, equipment and transport equipment production, petroleum and chemical production equipment, production of refrigerators and freezers and automobile production.

7. In **West Development Region**, in Caraș-Severin, Hunedoara and Timiș counties, are developed extractive, steel, metallurgical and machinery industries branches. In the region there are significant coal deposits and exploitation (Petroșani Basin), coal (Anina), oil, natural gas and marble. There are too: steel industry, heavy machinery construction, mechanical equipment, electrical equipment, automobiles equipment, furniture, chemicals, construction materials, textile and clothing industry, leather industry, food and beverage industry. The main specialization are

mining and quarrying industry. Manufacturing is found in mostly of Arad and Timiș counties, and production and supply of electricity and thermal energy are found mainly in Hunedoara county.

8. **Bucharest-Ilfov region** is the largest industrial agglomeration of Romania, where are present all industries. The main industrial activities of the region are: machine-tools, paint and varnish, meat products, footwear, measurement and control equipment and instruments, furniture, medical equipment, food, medicines etc. The construction sector recorded a spectacular growth in terms of gross value added, over 200% in the period 2005-2008. Clusters of Bucharest-Ilfov region cover fields like: electronics, textiles, food industry, electrical engineering, aerospace, mechatronics and automation systems.

4. CONCLUSIONS

Romanian **industry** faces with problems regarding high levels of not yet identified resources, poor promotion on internal and external market, dependence of certain areas of a single industry.

Economic and social development in certain areas of Romania depends largely on industrial sector and on the last restructuring of recent years with significant adverse effects in these territories.

Lack of amended legislation in agreement with development of the sector causes many problems that contribute to the inability of active companies in this sector to develop and become competitive on the domestic and foreign market.

The territorial development of specific industries must pursue an economic and social development independent of this sector, with the aim of sustainable and effective development.

Construction sector, along with other sectors of the Romanian economy continues to be sensitive to the fluctuations of national economy, according to the results achieved in recent years.

Legislative and economic instability are the main factors that influence significantly the construction sector. The lack of strong support from the banking sector, and the other two elements outlined above, contributed to the deepening crisis in the romanian construction market.

For further development of this sector is important to create an enabling environment for attract new investors and for consolidate the market position of existing ones.

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