

ANALYSIS OF LABOR MARKET IN THE SECONDARY SECTOR ON ROMANIAN DEVELOPMENT REGIONS

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Abstract:

In this paper we analyze and highlight the evolution of workforce engaged in the secondary sector. We determined too the unemployment rate distribution, which is coupled with the decline of industry and constructions and there are identified zones and cities affected by major rising unemployment.

The increase of unemployed number in the secondary sector was primarily due to the decline of manufacturing industry and mining.

At Bucharest and growth poles level, it shows that between the secondary sector branches: industry and construction, the most employees are engaged in the industrial sector, especially in manufacturing industries, although this sector ranks on the second place in order of preference. Most of the employees choose jobs into the tertiary sector.

Regarding the distribution of the number of employees per industrial subsectors, it appears that most of them work in manufacturing, followed water supply and waste, then energy supply and a very small percentage in the mining. The activity sectors reveal that most employees are engaged in secondary and tertiary sectors, and then, in a very small proportion, in the primary sector.

At regional poles level, the largest number of employees are engaged in industrial sector. In the construction sector, the number of employees is small.

Counties associated of Bucharest metropolitan area recorded the greatest number of employees in construction.

All analyzed territories recorded positive evolutions in the number of employees in 2011 compared to 2002. Counties associated of some metropolitan areas, including Bucharest, showed a positive trend, superior to other types of areas in 2011 compared to 2002.

Compared to the situation in construction sector, the industry is characterized by a decrease of the number of employees in 2011 compared to 2002.

Even in a general context characterized by instability in the industry, some types of analyzed areas showed a rising trend.

In 2011, compared to 2006, most analyzed areas recorded increases in the number of employees in industry compared to 2002.

Key words: secondary sector, industry, construction, employees, tertiary sector, activity sectors

JEL classification: E24, J21

1. INTRODUCTION

Romania follows the provisions of European Union policy, in the secondary sector, 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.

Industrial contribution to Romania's GDP is significant (respectively one third), this economic sector providing jobs for one fifth of the total number of employees.

This sector includes mining subsectors, primary processing industry and public utilities services, but is generally oriented towards less advanced forms of production. Economic restructuring and privatization have led to increased unemployment and poverty, particularly in the monoindustrial towns, so there are clear differences at the local level on the industrial

development. Construction sector contributes to GDP less than 9%. The economic crisis of the recent years has led to a decrease of activity in this sector.

Decrease in the number of employees in the secondary sector was mainly caused by the decline of manufacturing and mining, aspect that prevailed in the small towns, that have suffered in recent years a strong industrial decline.

In the secondary sector, consisting of industry and construction, are employed 28,3% of the total workforce employed at national level. In 2011, in Romania, the employed population was 8.365.500, of which 2.364.700 were working in the secondary sector. The contribution of the secondary sector in the GDP, was about 208.491 million. lei, respectively 43,1% and reported to the number of employees who worked in the secondary sector, the value was 0,088 mil. lei/employee (Table 1).

Table 1 - Secondary sector - GDP, Employment

| Sector | GDP 2011 (mill. lei) | GDP % total | Employment rate 2011 (thousands) | Employment (% total) | GDP/employee 2011 (mill. lei) |
|-------------------------|-------------------------|----------------|-------------------------------------|-------------------------|----------------------------------|
| Primary sector | 32.814 | 6,8 | 2.442 | 29,2 | 0,013 |
| Secondary sector | 208.491 | 43,1 | 2.364,7 | 28,3 | 0,088 |
| Industry | 160.928 | 33,3 | 1.753,8 | 21,0 | 0,092 |
| Constructios | 47.563 | 9,8 | 610,9 | 7,3 | 0,078 |
| Tertiary sectorul | 242.400 | 50,1 | 3.558,8 | 42,5 | 0,068 |
| Total sectors | 483.705 | 100,0 | 8.365,5 | 100,0 | 0,058 |

In the industrial sector are employed 21% of the total workforce engaged at national level. This value is superior to the EU27 average. This various subsector comprises mining and primary processing, then the manufacturing industries and public services. Labour productivity, calculated according to GDP per employee is above average, but not very high in absolute terms, reflecting the orientation on less advanced forms of production with low added value.

Construction sector in Romania is more developed than in most EU countries. Thus, the number of active companies in this field and the contribution to GDP is around 9%, while the labor force employed in this sector has a lower share, which indicates an above average level of labor productivity.

2. COMPONENTS SUBSECTORS OF SECONDARY SECTOR

Industry is composed of four subsectors (sections: B, C, D and E, according to CAEN Rev.2):

- mining, which engages 3,7% of total employees of the industry,
- manufacturing, which engages 85,2% of employees of the industry,
- production and supply of electricity, thermal energy, gas, hot water and air conditioning, which engages 4,1% of employees of the industry,
- water supply, cleaning, waste management and remediation activities, where operates 7% of employees of the industry.

An important role for economic growth and job creation, it has manufacturing, which is the subsector that records the highest number of employees both in Romania and European level. The contribution of the sector is 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 the turnover (approx. 25%) are food industry and motor vehicles industry. Also, metallic construction and metal products industries are in the top five in Romanian manufacturing industry, such as number of employees (7,76%) and in turnover (5,78%), which proves the importance of this branch at national level. This industrial branch is also important at European level, which holds 6,93% of the turnover of manufacturing and 9,79% of added value, and 11,66% of employees of manufacturing who work in this field. Romania is situated below the European

average, but this gap is possible to be reduced in the future, because the annual investment per employee increased.

In 2011, a significant percentage of employees, were registered: in food industry (in Calarasi, Ialomita and Ilfov counties), textile industry (in Botoșani, Călărași, Vrancea, Brăila counties), in the wood processing industry in Harghita, Brașov, Maramureș, Bistrița Năsăud counties, manufacturing of motor vehicles (in Argeș, Arad, Bistrița Năsăud, Caraș Severin, Hunedoara and Timiș counties), in metallurgical industry (in Galați, Dâmbovița and Olt counties) etc.

The construction sector includes the following subdivisions:

- providing products and construction elements;
- organizational work, buildings construction, plumbing;
- renting of construction equipments;
- professional services.

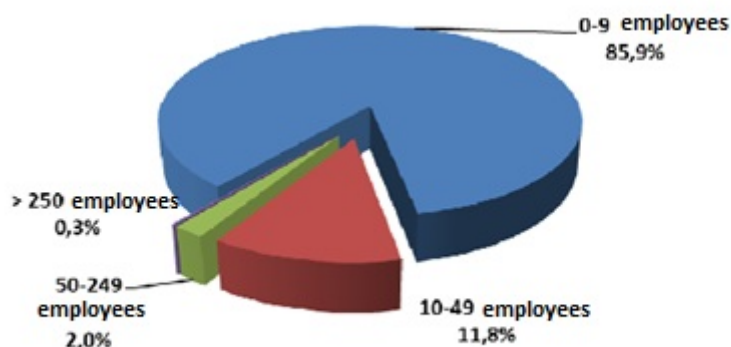


Figure 1 - Structure of active construction firms by number of employees in 2010

Source: INS, INCD URBAN-INCERC

In figure 1 it is noted that the largest share is registered in the category of 0-9 employees, so in construction prevails firms with very few employees. Also, the development of companies in this sector is closely linked to the expansion of urban infrastructure of local and national roads, sewerage and water supply. It is linked too to the industrial works, railway rehabilitation, rural road infrastructure, the execution works in the field of renewable energy.

3. ANALYSIS OF EMPLOYMENT IN THE SECONDARY SECTOR

In **industrial** branch, vast majority of counties (Satu Mare, Maramureș, Bistrița Năsăud, Cluj, Mureș, Sibiu, Vâlcea, Arad, Hunedoara, Caraș Severin, Dâmbovița, Teleorman, Calarasi, Ialomița, Brăila, Botoșani, Iași, Neamț, Bacău, Covasna) was affected by the decrease by the number of companies in the field and therefore by the number of employees working in this area during 2002-2011. There are counties where the number of firms increased (Bihor, Sălaj, Alba, Timiș, Gorj, Dolj, Olt, Argeș, Brașov, Prahova, Harghita, Suceava, Iași, Galați, Vrancea, Buzău, Prahova, Giurgiu, Tulcea, Constanța), the largest increase being in Ilfov county.

Number of companies that has worked in the **construction** industry and consequently the number of employees increased in 2011 compared to previous years. In some counties (Hunedoara, Mehedinți, Covasna, Brăila, Constanța), the increase was till 100%, but in a large number of counties, the increase was till 200%, for example: Satu Mare, Maramureș, Timiș, Caras Severin, Mures, Sibiu, Valcea, Gorj, Dolj, Brașov, Prahova, Buzau, Ialomita, Calarasi, Tulcea, Botoșani, Iași, Neamț, Bacău and Vaslui. There were counties that have risen over 200%, for example: Bihor, Arad, Sălaj, Cluj, Alba, Bistrița Năsăud, Suceava, Harghita, Vrancea, Galați, Argeș, Dâmbovița, Olt, Teleorman, Giurgiu and Ilfov.

Employment in industrial sector declined significantly in the Western region, especially in industrialized counties: Hunedoara and Caraş-Severin, especially because massive lay-offs in mining and metallurgical sectors. Coal basin Jiu Valley (Aninoasa, Petroşani, Urlicani, Petrila, Lupeni, Vulcan) was strongly affected by the massive restructuring recorded in industry.

During 1999-2011, the number of employees in industry in the Central Region decreased 42%, the most affected industrial branches by restructuring being machinery industry, metallurgical industry, chemical industry, mining and quarrying (Alba 4,4%, Braşov 57, 1%, 39,4% Harghita, Mureş 32%, Sibiu 29,2%, Covasna 26,4%).

The largest number of firms operating in industry and construction in 2011, is recorded in Bucharest, Cluj, Timiş, Braşov, Constanţa, Prahova, Bihor, followed by other counties (Figure 2). In construction, the order is approximately the same.

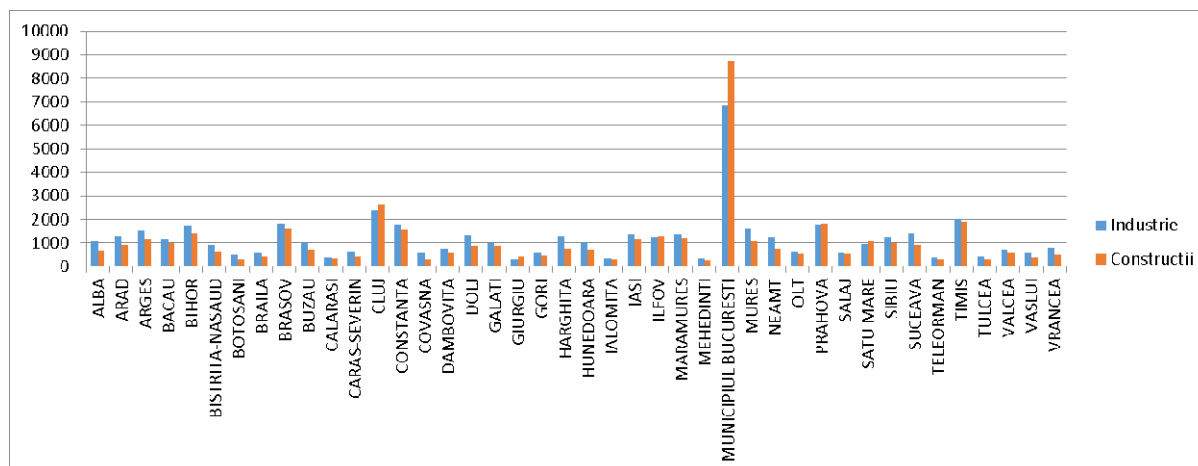


Figure 2 - Number of firms in industry and construction, 2011

Source: INS data processing

Regarding the distribution of the number of employees per industrial subsectors, it appears that most of them work in manufacturing, the highest values recorded in Timisoara, Cluj, Craiova, Braşov etc. Bucharest did not occupy a leading position. Follow then water distribution and waste and energy supply sectors and the last, mining industry. The highest percentage of extractive industry is in Bucharest, Ploieşti, Constanţa (Figure 3).

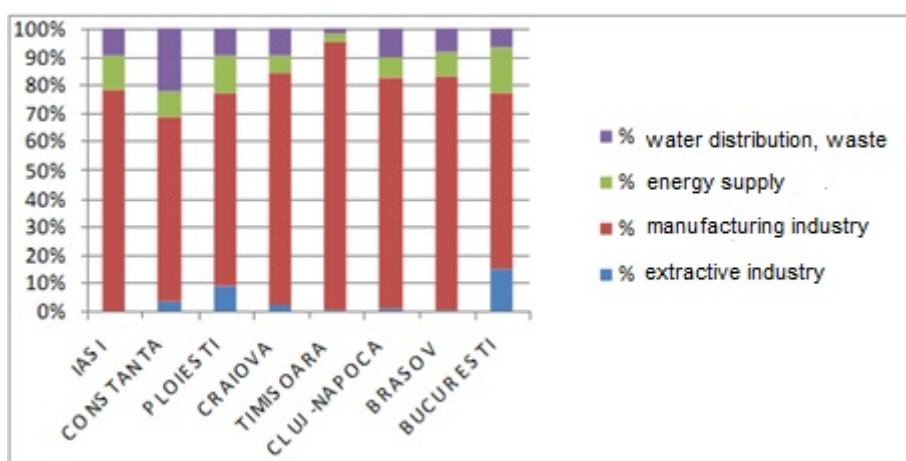


Figure 3 - Distribution of the number of employees on industrial subsectors for Bucharest and growth poles cities

Source: ONRC data processing

On activity sectors it is note that the most employees are engaged in the tertiary sector, excepted Timișoara, followed by the secondary sector, and the last is the primary sector (Figure 4). The highest percentage of tertiary sector are in Bucharest and Constanța.

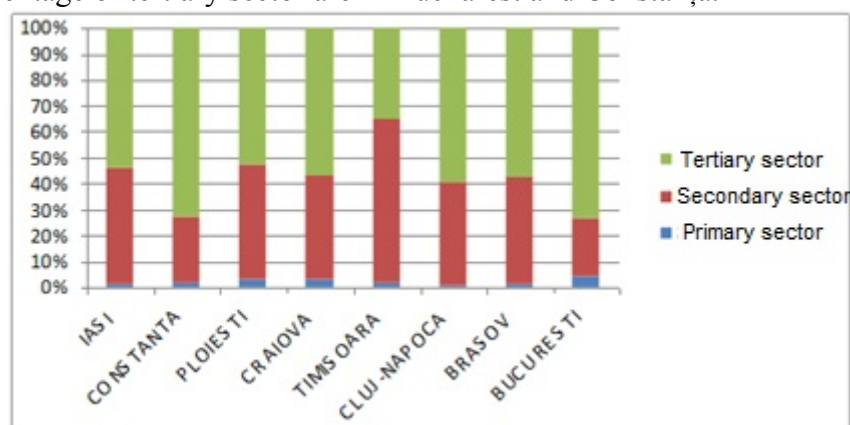


Figure 4 - Distribution of employees on sectors for growth poles cities and Bucharest

Source: ONRC data processing

It can be said that in Bucharest and **growth poles cities**, the most employees are engaged in the industrial sector, especially in manufacturing industries, although this sector ranks the second place in order of preference, because the most employees choose the tertiary sector to work.

At the **development poles**, of the two branches of secondary sector - industry and construction, the most employees are engaged in the industrial sector, especially in manufacturing industries, secondary sector being situated at par, in order of preference for jobs, together with tertiary sector.

At the **poles of regional importance** the largest number of employees are engaged in the industry, standing on top Buzău, Bistrița, Slatina, Mediaș, Târgoviște, Tulcea, Drobeta Turnu Severin etc. In construction the number of employees is reduced. However, on the first places are situated Buzău, Drobeta Turnu Severin, Piatra Neamț, Târgoviște etc. (Figure 5).

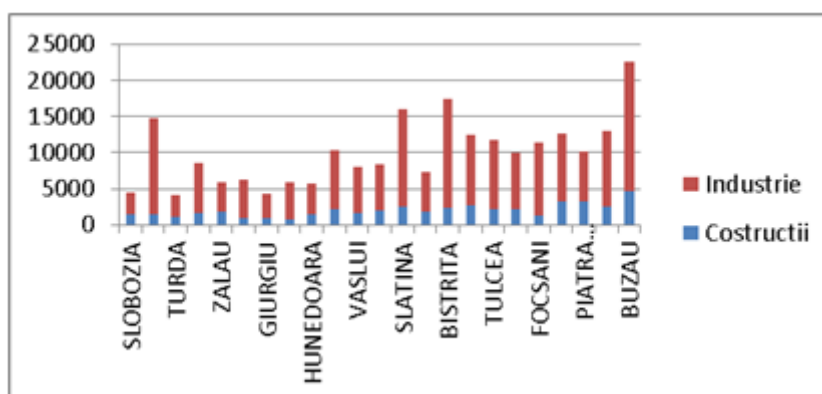


Figure 5 - Distribution of employees on activity sectors at the poles of regional importance

Source: ONRC data processing

On activity sectors, it is found that most employees are engaged in the secondary sector, followed by the tertiary sector, and last, in a very small proportion, is situated primary sector (Figure 6).

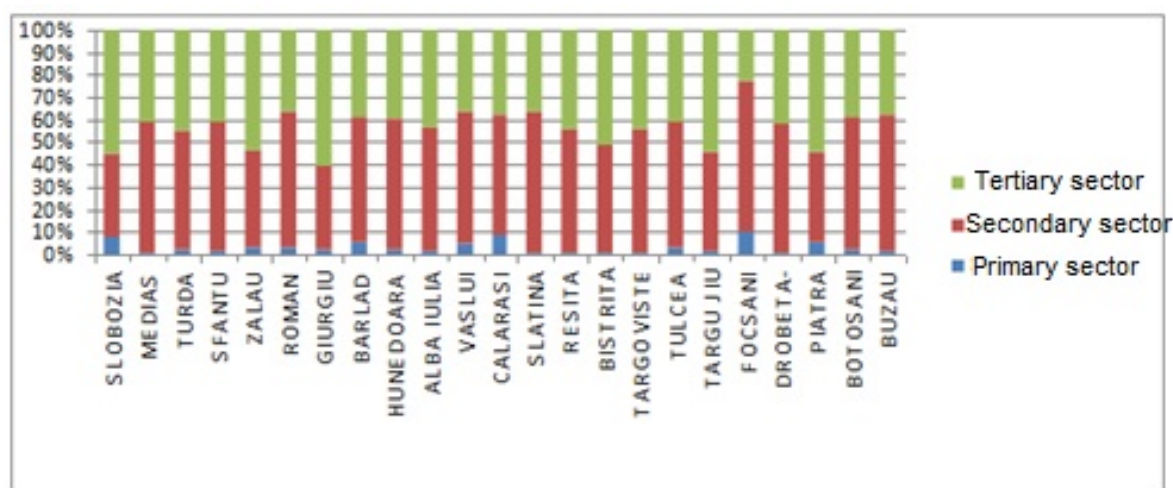


Figure 6 - Distribution of the number of employees on sectors for poles of regional importance

Source: ONRC data processing

Regarding the distribution of the number of employees per industrial subsectors, it appears that most work in manufacturing, followed then water distribution and waste and in a very small proportion is the energy supply. In Medias there is a special situation, where the percentage of those working in the mining industry is very high (Figure 7).

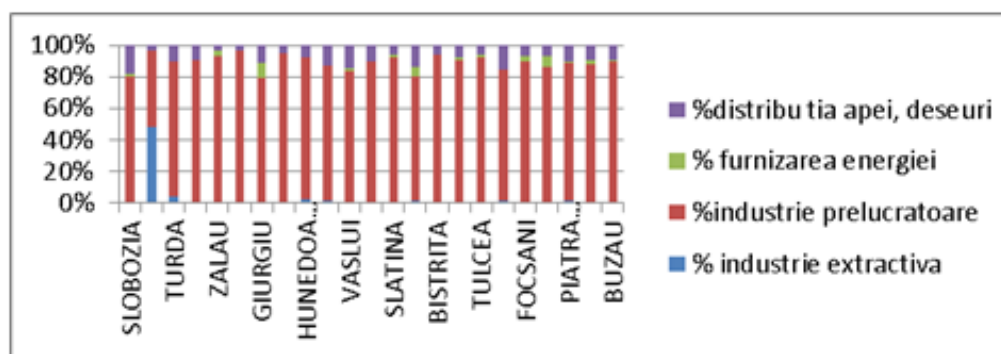


Figure 7 - Distribution of the number of employees in industrial subsectors for poles of regional importance

Source: ONRC data processing

In conclusion, on the poles of regional importance, it is found that of two branches of the secondary sector - industry and construction, the most are those employed in the industrial sector, especially in manufacturing industries, although this sector represents approximately the same position as the third sector in order of preference of employees. A small proportion of employees works in the primary sector in several centers of regional importance: Focșani, Calarași, Slobozia, Bârlad, Vaslui etc.

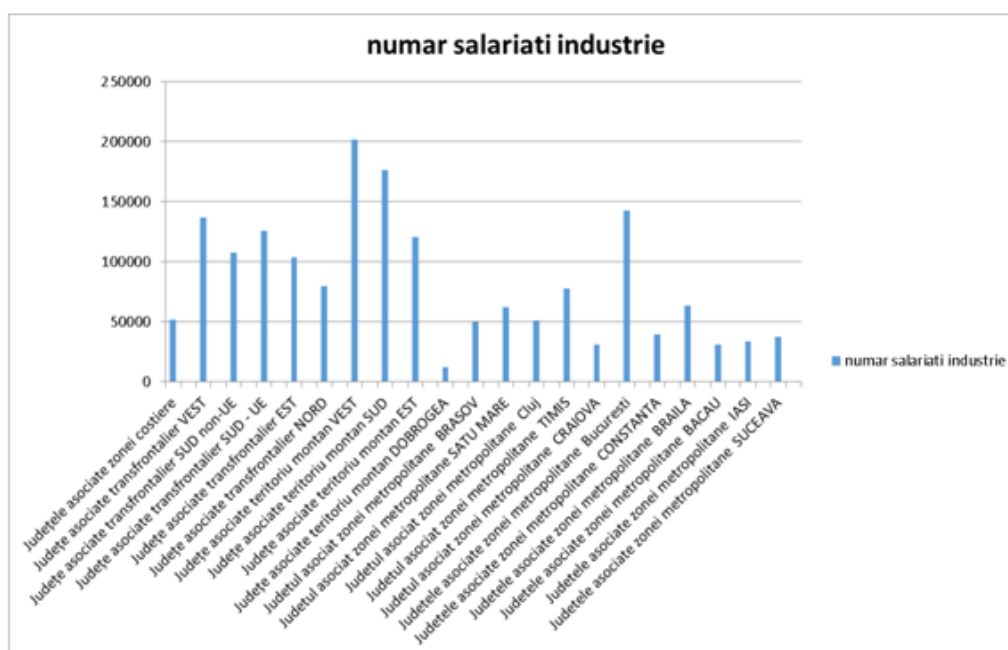


Figure 8 - Distribution of the number of employees in industry on different areas

Source: INS data processing

In different regions of Romania, the situation of the number of employees is the following:

In the counties associated to western mountain territory was recorded the highest number of employees in industry (Figure 8), followed by counties associated to the southern mountain territory. In coastal and metropolitan areas of Cluj and Braşov the number of employees in industry is about 5.000.

The lowest number of employees in industry is recorded in the counties associated to Dobrogea mountain territory, with 60% lower than the counties associated to metropolitan areas of Craiova, Bacău, Iaşi, respectively 70% of the metropolitan areas counties of Constanţa and Suceava.



Figure 9 - Distribution of the number of employees in construction on different areas

Source: INS data processing

Counties associated to Bucharest metropolitan area recorded the greatest number of employees in construction, significantly higher than other types of areas analyzed (Figure 9). Over

30.000 employees are registered in the counties associated to western and southern mountain, respectively in the counties associated to East and South-EU borders, with about 60% less than in the metropolitan area of Bucharest.

Counties associated to Dobrogea mountain territory, metropolitan areas of Craiova, Bacău, Iași, Suceava retains their unfavorable position in terms of number of employees in construction.

4. CONCLUSIONS

Evolution of secondary sector employment is according to the economic changes which Romania crossed.

1990-2000 was a difficult period of economic decline, when the economic restructuring process was accompanied by an appreciable restriction or closure of existing production capacities, the most affected economic sectors being mining, chemical industry and non-ferrous metallurgy industry. This fact was reflected in the decline of the employment rate. From 2000-2001, the economic climate has improved, the economy resumed the growth, and the years 2006-2008 brought strengthening of economic growth and the increase of the employment rate. 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. Some foreign companies withdrew or reduced their presence and thus employed population decreased.

The period 2006-2010 was one unfavorable for the industry. The labor force level decreased in some years about 8% than in previous years. Existing data show a slight recovery in the industry in 2011, with an increase of workforce about 0,4% compared to 2010.

It showed a slight decrease in the number of employees in industry in 2002-2007, a sharp increase in 2008, followed by a significant decrease in 2009 and a slight recovery in 2011. The fewer employees in the industry are in Giurgiu, Ialomița, Calarași, Tulcea. The counties with the most employees in the industry are: Timiș, Prahova, Argeș, Bihor, Arad, Cluj. Evolution of the number of employees is maintained in the regions too.

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