

DISPARITIES ON THE LABOR MARKET IN ROMANIA FROM THE PERSPECTIVE OF INCOME**Mirela MINICĂ***University "Eftimie Murgu" of Reșița, Romania
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s.demyen@uem.ro***Abstract**

The present paper aims to present an overview of the labor market in Romania, from at least two main points of view. We used data provided by the annual Romanian Statistical Yearbook in order to analyze the evolution of wages in Romania for a timeframe of ten years, as well as to study the evolution of the number of employees in different type of companies, by dimension. The first part of the paper consists in presenting a theoretical background with references to the labor market, while the second part presents the case study on the evolution of representative indicators for the proposed subject.

Key words: *labor market, wage, employees, enterprises, competitiveness*

JEL Classification: *E24, J21, J30*

I. INTRODUCTION

The current labor market theory is based on the marginalist approach, starting with Marshall's model (highlighted in the Principles of Economics, 1890).

The demand-supply relationship and the marginal productivity of work was detailed by John R. Hicks in The Theory of Wages (1932) and L. Robbins in his paper "On Certain Ambiguity in the Conception of Stationary Equilibrium" (1930) highlights the conditions that determine its growth or decreasing tendency of the labor supply, depending on the elasticity of the demand to income change.

The magnitude of the marginal productivity of the labor factor results from the type and efficiency of combining human capital with other capital goods. Thus, an increased performance in an individual's activity can not only be the result of an additional level of education or a training period. Account must also be taken of the general economic situation, the stock of capital (technologies) existing in the respective economy. We may deduce from this that the entrepreneur can also contribute to increasing employee productivity - and implicitly increasing their wages - by investing in order to increase the capital stock used in production.

Like any other monetary cost of a transaction between two economic agents, the salary is a "price" of the work done by the employees. And like any type of costs, it naturally forms when the demand of labor meets the labor offer, ie by reporting all entrepreneurs willing to employ the number of possessors of the skills they need in the organization. It should be noted that for geographical reasons and other specifically characteristic of each economic sector, this ratio is not constant, there may be areas or fields where there are too many potential employers relative to employees or vice versa. A minimum wage imposed by law implies that there is a symmetrical distribution of space between both categories of agents and / or a perfect mobility of force or jobs, both premises being false.

The level of wage, identified as the price of labor, determines the shape of the labor supply curve generated by the income and substitution effect.

Economic factors – in particular prices and income – may have the strongest influence on the dynamics and structure of consumption, especially in low living societies. (Tănase, 2009)

Neo-classical economists P. Samuelson (Economic Theory and Wages, 1951) and M. Friedman (Essays in Positive Economics, 1953) formulate models according to which enterprises maximize profits when employees increase their income.

G.Becker, on the other hand, makes a threefold contribution to understanding the labor market mechanism from the perspective of discrimination on this market (1957), of the investments in human capital (Human Capital, 1964), and the development of household production theory (A Treatise on the Family, 1981).

II. TRENDS IN REDUCING THE INEQUALITY OF REVENUES FROM THE EUROPEAN PERSPECTIVE

The convergence policy between the level of macroeconomic indicators in the countries of the European Union translates to the level of social cohesion close to the level of income and implicitly to the reduction of the existing inequalities in the level of salaries.

Although the Treaty of Rome (1957) provides for a fundamental objective reducing "the differences existing between the various regions and the backwardness of the less favoured regions", the term convergence appears explicitly in the Maastricht Treaty (1992), with reference to certain fiscal and monetary indicators in the context of the creation of the Single European Market.

Articles 174-178 of the Single European Act (1986) mention a fundamental concept of European policies of "cohesion", which addresses both economic and social aspects of reducing disparities between development of regions.

The recently adopted European Pillar of Social Rights⁵ was "designed as a compass for a renewed process of upward convergence toward better working and living condition in the European Union" (European Commission, 2018)

In the 1970s, equal payments for women and men represented a key aspect of wage negotiations in many European countries. Thus, in Denmark, such a policy became law in 1976 (Smith, Westergård-Nielsen, 1988, p.115).

Showing solidarity a determinative importance in the realization of an integrated area, Marchal will define three integration processes, components of full integration, according to the nature of solidarity, meaning: economic, social and political integration. Economic integration means achieving of economic solidarity by forming a complex network of interdependent connections between economic agents of participating countries. Social integration completes economic integration and is specific to full integration, but there will never be total, because people will never feel completely united. Political integration, as consequence of the other two, means the existence of decision unity and may be achieved in two forms: federal and co federal. As finality, territorial integration will be both economic and social and political, a process developed in all the three domains. (Minică and Franț, 2008)

The European Labor Market Laboratory, amid a period of economic expansion, generated a set of policies between 1995 and 2007, in order to reduce income gaps between regions but, in parallel, in developed countries, there was observed an increase in the income gap between different social classes. These have been amplified by the Great Recession in 2008 (Atkinson, 2015).

Due to this mobility, several EU Agenda projects have been developed: opening up a labor market for EU countries, creating a job vacancy web site across the EU family, creating a directive that would lead to the mobility of pensions, etc. (Grosu, 2018)

With all these variations, the results of some studies (Deiningner and Squire 1998, Benabou 1996, Clark 2013) point out that income disparities between countries have diminished over time. This convergence of income distribution among countries is the result of the following forces: institutional development and homogenization (Meyer et al., 1997), labor law harmonization (Levy 1966), technological development impact and the standardization of policies imposed by international organizations (Bhalla 2002; Torfason and Ingram 2010).

The Romer model of economic growth developed in 1986 is characterized by the presence of technological externalities that come from the accumulation of a factor K, which is not necessarily physical capital, the author using the concept of "knowledge" derived from human capital (Minică, 2005).

In Romania, labour market operation is hindered by the existence, still largely spread, of black labour or moonlighting, by the filling of different positions based on criteria different from those of value, by labour force emigration, by the problems occurred in the employee-employer relation, by the existence of a contested legislation in the field etc. (Tănase et al, 2013)

III. SALARY – THE PRICE OF LABOR

Apart from some positive aspects, the significant economic development recorded globally during the current period – marked by the intensification of globalization – has entailed several shortcomings, including in terms of the equity in the distribution of income. (Botescu, 2018)

The salary is the price at which the transaction is made for the exercise of the labor factor, in the

⁵https://ec.europa.eu/commission/priorities/deeper-and-fairer-economic-and-monetary-union/european-pillar-social-rights/european-pillar-social-rights-20-principles_en.

conditions of the market economy, ie the income that comes from the labor factor due to the direct participation, together with the capital production factor, to the economic activity (Minică, 2004).

1. The right to receive a salary - considered to be the corollary of the right to work - represents a fundamental prerogative of the individual, as evidenced by the Universal Declaration of Human Rights: "Everyone who works has the right to a fair and sufficient salary to secure him and his family an existence in accordance with human dignity". The minimum wage is the salary considered sufficient to meet the vital needs of the employees, taking into account the economic and cultural development of each country.
2. Introducing and maintaining it is based on two main arguments. The first is to reduce the extreme poverty a part of the population is facing. The second is to reduce employer's control over salary levels. Many of us will say, yes, it would be good for the state to force the "patron" to pay more! It is easy to understand that each of us wants to gain more. But what else can we say if the same state would it also oblige us (employer's employees) to spend more on salary on a product X and less on Y? Of course, we would consider this is an abuse, since we are the right-holders of money received in return for work. If correctness and logic can be considered as features of modern man, then we can deduce that neither we (nor the "patron") can be required to allocate our own money at the discretion of a third party (be it the state!). Therefore, requiring the entrepreneur to pay a higher salary than he would have is neither ethical nor effective!
3. A logical deduction in terms of minimum wage is that its level is always above the balance salary established on the market; if it were equal to or less than the balance one, the measure regarding minimum wage taxation would prove to be unnecessary.
4. Economic laws show that a rise of prices leads to significant changes in supply and demand, meaning that fewer jobs will be offered by firms, with some of the labor supply being affected. It is noticeable, however, that labor demand and supply do not meet on a single labor market. There are different skills and qualities. Thus, imposing the minimum wage does not have the same effects for all individuals or in all economic branches. In the high-end industries such as software, the implications of the minimum wage are almost zero because the average salary level is well above the state's minimum wage. Also, those with a high level of experience and / or skills will not be affected, with a higher labor productivity and therefore a salary.
5. In a market economy where private ownership, competition and free prices are the main pillars on which the structure of production is placed - and not only - it is impossible to make an individual worth more by requiring someone to pay more than be offered under a voluntary exchange. At most, you can deprive the individual of the right to earn the amount they deserve according to their abilities and experience as they will be fired. And, as we have seen, society will be deprived of those assets that the individual would have produced if they were allowed to work for a lower pay.

IV. RESEARCH METHODOLOGY AND RESULTS

In order to study the relationship between the net salary level and the number of employees in the Romanian enterprises, we selected, as a first stage, two sets of statistical data regarding Romanian enterprises, chronological series, the period studied being a ten-year term, between 2008 and 2017, the data used for the post-accession period to the European Union. The main source used was the Statistical Yearbooks published by the National Institute of Statistics for the years 2009 - 2018.

We will analyze in the present paper the evolution in time of the two indicators mentioned above, this research being the premise for the continuity of the study by elaborating further articles, aiming to establish connections between the indicators, using the regression analysis.

As far as the data used is concerned, these can be grouped according to the size of the enterprises analyzed, in three categories, namely: less than 50 employees, between 50-249 employees and more than 250 employees, corresponding to an analysis on categories of SMEs, on the one hand, and large enterprises on the other. We can also perform a gender-based analysis of the same employees, the data being grouped into male and female categories, both in terms of wage and number of employees.

For each data set grouped by enterprise category, the evolution over time was calculated by estimating the changes in absolute values with fixed basis and with chain basis, calculating the dynamics index and the growth rate using the following calculation formulas:

Table 1. Calculation formulas

Changes in absolute values	- with fixed basis	$\Delta i / 1 = y_i - y_1$
	- with chain basis	$\Delta i / i - 1 = y_i - y_{i-1}$
Dynamics Index	- with fixed basis	$I_{i/1} = \frac{y_i}{y_1}; i = \overline{2, n}$

	- with chain basis	$I_{i/i-1} = \frac{y_i}{y_{i-1}}; i = \overline{2, n}$
Growth rate	- with fixed basis	$R_i / 1 = \frac{\Delta_{i/1}}{y_1} \cdot 100$
	- with chain basis	$R_i / i-1 = \frac{\Delta_{i/i-1}}{y_{i-1}} \cdot 100$

source: Şipoş, Preda, 2004

For the current study, the following data were used for the 2008 - 2017 timeframe:

Table 2. Net earnings in terms of wage and the number of employees (2008 – 2017)

	Net earnings in terms of wage			Number of employees		
	Under 50 employees	50 – 249 employees	Over 50 employees	Under 50 employees	50 – 249 employees	Over 50 employees
2008	843	1217	1644	1531000	1088000	2427000
2009	844	1294	1735	1481000	1061000	2232000
2010	903	1354	1711	1298000	988000	2090000
2011	957	1380	1759	1208000	1051000	2090000
2012	960	1439	1854	1201000	1146000	2096000
2013	973	1512	1988	1275000	1103000	2066000
2014	1083	1617	2130	1314469	1116879	2076381
2015	1235	1799	2296	1362792	1143371	2105232
2016	1362	2057	2519	1508993	1093361	2157065
2017	1602	2355	2873	1615067	1103135	2227666

source: Romanian Statistical Yearbook, 2009 – 2018, www.insse.ro

Thus, we observe that between the year 2008, which is the basis year, and the end of the analyzed period - 2017, there is a positive evolution of the net earnings in terms of wage in all three analyzed categories of enterprise. From a structural point of view, there are, however, quite large discrepancies for the level of this indicator. This is mainly due to the category of companies, and the data in the table shows that in enterprises with more than 250 employees the earnings for most of the period reach a double level compared to the one in small enterprises, with a number of employees below 50.

It is a natural tendency, however, given the direct link between net earnings and the output indicators of large organizations, the concentric relationship being explained both qualitatively and quantitatively, the implications for the firm being multiple, not only economic, but also social and psychological. A large company, with significant results in terms of turnover and profit, will be able to reward the work of its employees with a higher level of rewards, while a small firm will always face challenges on the market that limit its ability to create performance from this point of view, and it is also possible to speak of competition with a greater intensity for SMEs.

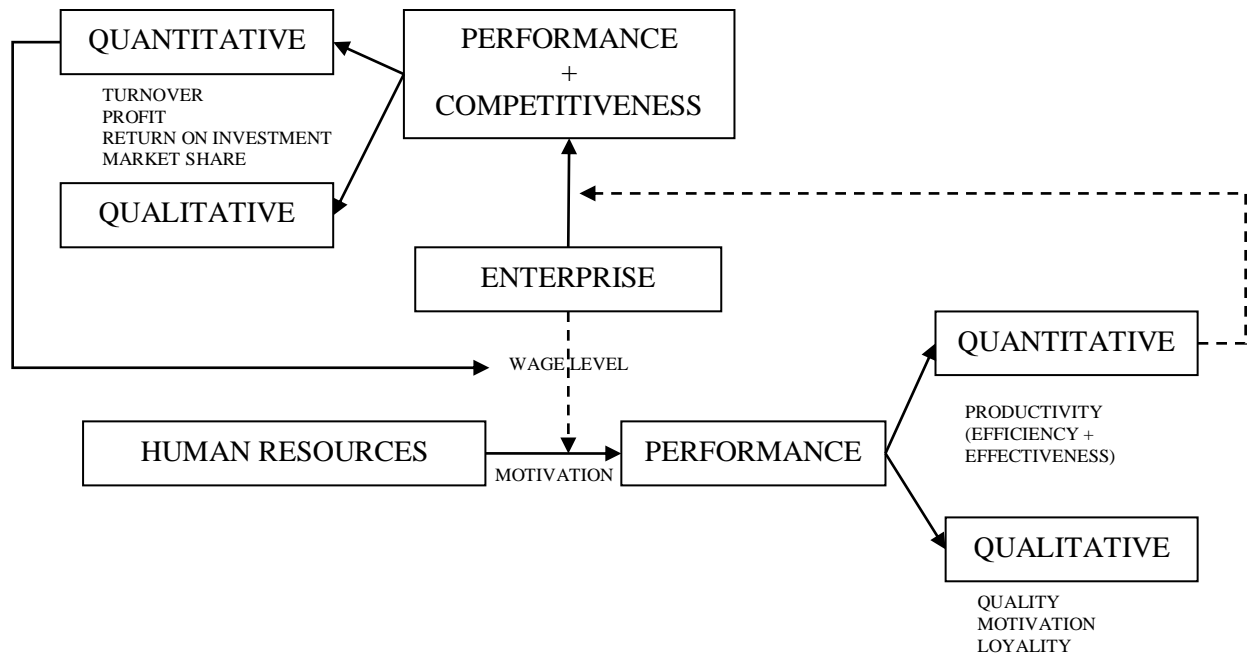


Figure 1 – The relationship between net earnings and the performance of the enterprise
 source: designed by authors

From a psychological and social point of view, on the other hand, the level of motivation of employees is most often in direct proportion to remuneration, with the salary being mentioned in the top of the most appreciated motivational tools used by managers. However, the reduced capacity to increase wage rewards is implicitly felt at a lower level of employee motivation.

The comparative evolution of net earnings in terms of wage for the 2008-2017 timeframe for the three categories of enterprises is presented as follows:

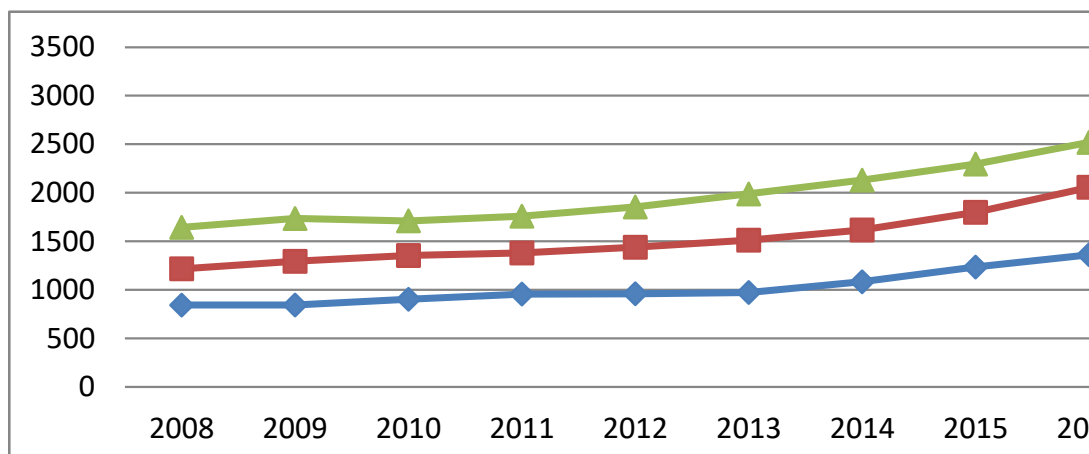


Figure 2 Comparative evolution of net earnings in terms of wage for the 2008-2017 timeframe
 source: designed by authors, using the information provided in the Romanian Statistical Yearbook, 2009 - 2018

The overall trend is therefore positive, of steady growth from one year to the next. It should be noted, however, that in the case of small enterprises with up to 50 employees the increase shown in the above graph is partly due to the increase in the minimum guaranteed wage level in the economy, landmark in the timeline being the years 2016 and 2018, when the minimum wage was increased by 19,05% and 31,03% respectively. The evolution of the minimum wage guaranteed nationwide, as well as the wage differences between the types of companies are listed below:

Table 3. Wage differences and the minimum level of wage

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Mean
Wage differences between big companies and medium sized ones	427	441	357	379	415	476	513	497	462	518	448,5
Wage differences between big companies and small enterprises	801	891	808	802	894	1015	1047	1061	1157	1271	526,2
Wage differences between medium sized and small enterprises	374	450	451	423	479	539	534	564	695	753	974,7
Minimum wage level	500 (jan) 540 (oct)	600	600	670	700	750 (febr) 800 (july)	850 (jan) 900 (july)	975 (jan) 1050 (july)	1250	1450	
Percent of increase	13,64% 8%	11,11% %	- %	11,6% %	4,48% %	7,14% 6,66%	6,25% 5,88%	8,33% 7,70%	19,0% %	16% %	

source: designed by authors, using the information provided in the Romanian Statistical Yearbook, 2009 - 2018

We can see that the wage differences between large enterprises and medium-sized enterprises are very close to that of medium and small enterprises, the average for the ten-year period being 448.5 lei in the first case, while 526.2 in the first case second. If we refer to wage differences between large and small enterprises, the calculated average will be 974.7 lei for the ten year period.

For the indicators of the dynamics index calculated either by comparison to the basis year 2008 or in the previous year, n-1, we find that, as compared to the basis year, the increase observed at the end of the period is 759 lei for small enterprises (within a 10-year horizon), 1138 lei for medium-sized enterprises, or 1229 lei for large enterprises. By percentage expression, the above-mentioned increase is 90.04% in the first case, 93.51% in medium-sized enterprises, respectively 74.76% for large enterprises, each of these percentages being reflected by the calculation of the fixed basis indicator.

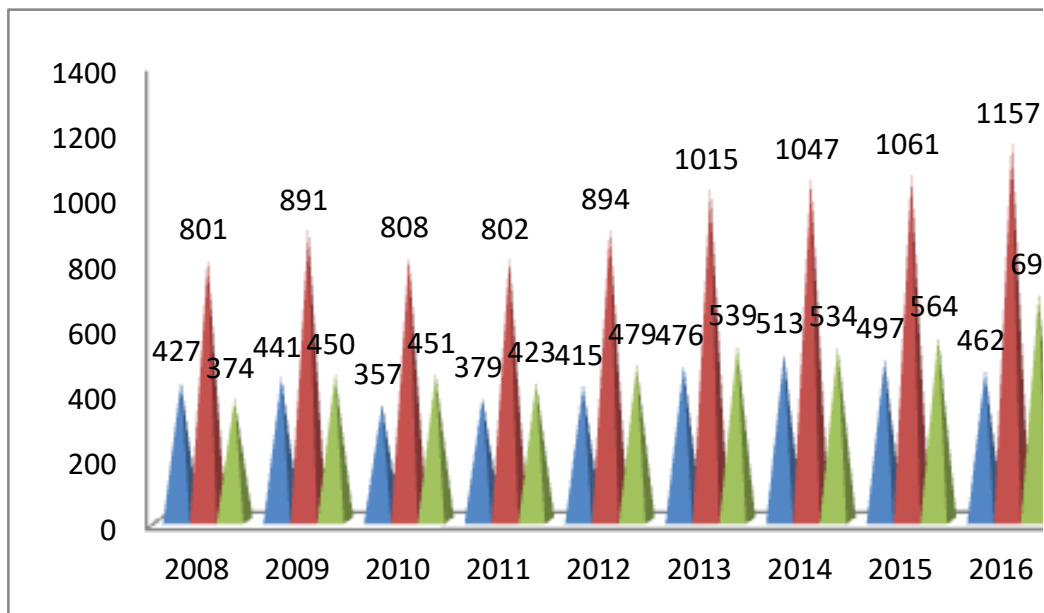


Figure 3 Wage differences between the types of enterprises

source: designed by authors, using the information provided in the Romanian Statistical Yearbook, 2009 - 2018

If we make the assessments also from the perspective of the dynamics index calculated for the chain basis, respectively the growth rate, the results obtained will indicate a positive trend of evolution. The lowest growth rate of wage for small enterprises was calculated for the 2008-2009 period, when the growth was only 0.118%, while the most significant growth rate corresponds to the period 2016-2017, when the growth rate in this category of enterprises, was 17.62%, the evolution for the rest of the period being as follows:

Table 4

2009 / 2008	2010 / 2009	2011 / 2010	2012/ 2011	2013 / 2012	2014 / 2013	2015 / 2014	2016 / 2015	2017 / 2016
0,1186	6,9905	5,9800	0,3134	1,3541	11,3052	14,0350	10,2834	17,6211

source: designed by authors, using the information provided in the Romanian Statistical Yearbook, 2009 - 2018

In the case of medium-sized enterprises, with a number of employees between 50 and 249, the lowest rate of wage growth is calculated for the timeframe 2010 - 2011, when the indicator reaches a value of 1.92%, while the interval 2015 - 2016 and 2016-2017 respectively represents the best periods of net earning with the highest percentage growth rates: 14.34% in the first case and 14.48% in the second. As for small enterprises, the growth rate is alternately decreasing and increasing over the observation period, in the case of medium-sized enterprises, we find that, after a period of decline between 2008 and 2011, the rate of growth is on an upward trend, with consecutive increasing values.

Table 5

2009 / 2008	2010 / 2009	2011 / 2010	2012/ 2011	2013 / 2012	2014 / 2013	2015 / 2014	2016 / 2015	2017 / 2016
6,3270	4,6367	1,9202	4,2753	5,0729	6,9444	11,2554	14,3413	14,4871

source: designed by authors, using the information provided in the Romanian Statistical Yearbook, 2009 - 2018

Large enterprises, on the other hand, are also different from this point of view, being the only category where the calculated rate also indicates a negative value for the period 2009 - 2010: -1.3832%, reflected in absolute values in a decrease in the level net earnings, from 1735 to 1711 lei. However, the 2016-2017 period corresponds to the highest rate of growth, calculated at 14.05% for that period.

Table 6

2009 / 2008	2010 / 2009	2011 / 2010	2012/ 2011	2013 / 2012	2014 / 2013	2015 / 2014	2016 / 2015	2017 / 2016
5,5352	- 1,3832	2,8053	5,4007	7,2276	7,1428	7,77934	9,7125	14,0531

source: designed by authors, using the information provided in the Romanian Statistical Yearbook, 2009 - 2018

The total number of employees at national level, operating in small, medium or large enterprises, has a fluctuating evolution over the period under review. Thus, we can conclude the following:

- most employees perform paid work in large enterprises, in which case we notice a decrease in the total number of employees, from 2.427.000 individuals in 2008 to 2.227.666 individuals at the end of the analyzed period;
- also, in this case, the lowest level is registered in 2013 (2.066.000 individuals), and the highest – in the basis year 2008 (2.427.000). The growth rate calculated in this case is thus negative for most years, if we take into account the calculations made using a fixed base. If we analyze the dynamic index and the growth rate using the chain base, on the other hand, we notice a decrease of 8,034% for the period 2008 – 2009, respectively 6,362% for the 2009 – 2010 timeframe, followed by a fluctuation period of 3 years.
- 2014 is the benchmark year for improving the overall situation, with a rising growth rate of 0.502% from 2013 to 2014, 1.389% from 2014 to 2015, 2.462% from the year 2015 to 2016, respectively 3.273% from 2016 to 2017.
- in the case of medium-sized enterprises, with 50-249 employees, the evolution is different, the variation of the values recorded for the number of employees indicating periods of successive decreases and increases, the differences from one year to the other being quite high in terms of percentage. The lowest level is registered in 2010 – 988.000 employees, while the highest level corresponds to 2012 – 1.146.000 persons. The calculated growth rate is negative for the first two years of analysis, with a positive evolution between 2010-2011 ($R_i / i-1 = 6,376\%$) and 2011-2012 ($R_i / i-1 = 9,039\%$), respectively. Growth periods are also represented by the timeframes 2013-2014 ($R_i / i-1 = 1,258\%$), 2014-2015 ($R_i / i-1 = 2,372\%$) and 2016-2017 ($R_i / i-1 = 0.893\%$).

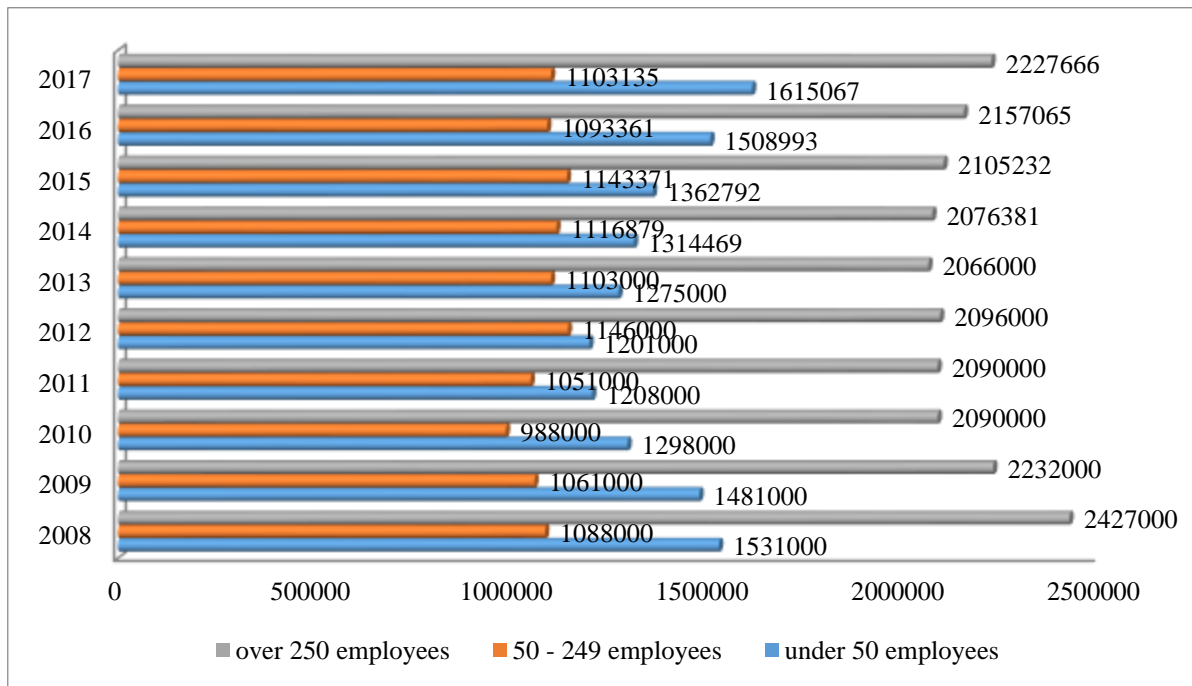


Figure 4 – Number of employees

source: designed by authors, using the information provided in the Romanian Statistical Yearbook, 2009 - 2018

In the case of small enterprises with up to 50 employees, the period 2008-2012 is a general decrease in the number of employees, the situation improving from 2012 onwards, with the rhythm of the base chain being $R_i / i-1 = 6.16\%$ between 2012 and 2013, 3.095% between 2013 and 2014, 3.67% between 2014 and 2015, the highest increase being observed from 2015 to 2016 (10.728%).

V. CONCLUSIONS

Analyzing the current labor market situation, we find that there are a number of premises for a positive evolution, but at the same time they are conditioned by the economic and managerial policies applied both at microeconomic and macroeconomic level.

This paper is intended to be a starting point for a wider study of gender disparities in the labor market, starting from the specifics of each type of enterprise according to size.

The data presented in the case study shows a positive development in terms of wage level for all three categories of enterprises analyzed, and the analysis of the evolution of the number of employees indicates an overall improvement, especially for large companies, which may even indicate a tendency for employees to migrate to this type of firm, being motivated by the higher level of rewards offered in terms of salary.

As literature states, "for firms in traditional sectors, it is no longer sufficient to base competitiveness on know-how" (Sala et al, 2016). It becomes more and more necessary a careful attention to human resources and their needs.

We must not ignore the fact that salary remains the main motivational element mentioned by employees (Demyen, Lala-Popa, 2013), regardless of the type of enterprise, being a transaction price for the exercise of the labor factor but at the same time a right guaranteed by law.

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