

UNEMPLOYMENT – DETERMINANT OF LABOUR MARKET

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Abstract:

The crystallization of the concept of labour market is a long-term process, acting in parallel with the expansion and diversification of the market economy, with the emergence of new features or phenomena, with generalization or collapse of some supply-demand ratio functioning mechanisms.

The labour market is the economic space of free trade for the owners of capital (as a buyer) and owners of work capacity (as sellers), where, through specific mechanisms, the supply and demand for labor are balanced.

In terms of the labour market, unemployment is a macroeconomic phenomenon, as opposed to the occupation, being interpreted as a surplus of the active population compared with that which may be hired in circumstances of return required by the market.

As labour is considered the primary means of showing personal needs, the unemployment state is branded as a negative situation with multiple consequences at the level of entire economic and social body.

Keywords: *labour market, labour demand, labour supply, unemployment, unemployment rate*

JEL codes: J23, J29, J21.

1. Theoretical approach to labour market

The labour market is an important component of the market of factors of production. It holds a central position in the market system; it first picks up the signals of other marketplaces, aggregates and amplifies their malfunctions and distortions and secondly it has the ability to transmit signals to other markets, creating its demands depending on their evolution. It also represents a free meeting economic area to owners of capital (as a buyer) and owners of work capacity (as sellers), where, through specific mechanisms, the supply and demand for labor are balanced. Basically it's the place where supply and demand are set in balance, through the free decisions of economic agents and wages are determined as the price of these transactions.

1.1. Functions of the labour market

For a harmonious development and functioning of the economy, the labor market is characterized by important functions, both economically and socially:

- a) efficient allocation of labour resources is made by spreading them on the different professions, branches and localities, as well as by their usage within various organizations, companies or firms;
- b) Achieving a balance between a country's economy demand for work of and the possibilities for their coverage;
- c) Joining the workforce with the means of production;
- d) Influence on the formation of income;
- e) It has an important role in helping to ensure the work environment and social protection, providing essential information in the process of vocational guidance, retraining and reintegration of the workforce.

Relations between economic agents participating in the exchange relations gives the labour market a number of peculiarities.

The first characteristic of the labour market is to be the most rigid, and for this reason, it is also the most fragile and sensitive. As a second feature, referring to other markets, it is the most organized and regulated, and from the point of view of operating mechanisms it is an imperfect market.

Contemporary labour market is a contractual and participatory market, where supply and demand are set to contract and salary negotiation.

1.2. The important factors of the labour market

1. Organization of businesses, workers and employers.
2. Expanding the system of rules and laws which helps in the formation of a certain order and discipline among economic operators acting on the labour market.

3. Extension of negotiations from the level of the company to the national level, balancing some issues, such as guaranteed minimum wage, sharing production increases between company and employees or the level of employment.

4. The government plays the role of the referee in the relationship between the suppliers and buyers of labour.

1.3. Mechanism of the labour market

Supply and demand of labour constitute the traditional components of the labour market. Together with these, a significant role in the functioning of this market belongs to the state and Trade unions involved in establishing economic and social balance.

A. Labour demand

Social and economic activity generates labour need. Labour demand does not consist only in the amount of work required to conduct economic activities; the basic condition for this need to transpose itself into labour demand is rewarding of work through salary.

As a result of this condition, the demand for labor is depicted as being the total paid work necessary for economic, social and cultural activities in a country. Labour demand comes from companies (that offer jobs for those able to work). Labour demand shall be measured by the number of existing jobs at the level of an economy. Labour demand depends on the demand for goods, on the quantity required for their production; that's why we label the labour demand as a derived demand and not an autonomous one. [3]

Labour demand depends primarily on the degree of economic growth, but also by other factors: investments, the structure of economic and social activities, forms of employment and the regime of occupation, labour productivity growth, international situation or the extent of the phenomenon of economic restructuring. As a universally valid principle, labour demand depends on:

- Marginal labour productivity;
- General conditions of economic activity.

At the level of national economy, the demand for labour is an aggregate one, that is derived from the sum of the individual demands of enterprises that produce goods and services.

A firm will turn to hiring additional workforce until the marginal product of labor P_{MgL} will exceed cost marginal labour cost C_{MgL} emerging from the real wage of workers, i.e. nominal salary relative to the price level.

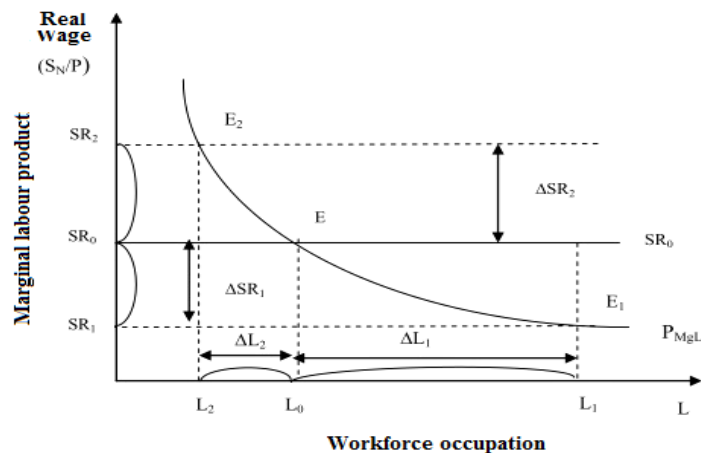


Figure 1: Additional demand for labor depending on a real wage
Source: Cişmas Laura, 2012, Macroeconomie. Note de curs, pag. 6

Notice in Figure 1 that the balance is in E, at the point at which the real wage (SR_0) is equal to the marginal product of labor (P_{MgL}), which corresponds to a number of workers equal to L_0 . Thus, at a given real wage SR_0 , the optimal number of workers is L_0 . If the number of workers increases to $L_0 - L_1$, given that an additional number of workers ΔL_0 , would have been employed, then the balance point between the marginal product of labor, and real wage SR , will go down to point E_1 , which corresponds to a real wage SR_1 lower than real wage SR_0 , SR_1 , with a change of ΔSR_1 . The only solution to achieve a real salary close to SR_0 , would be by reducing the number of workers with ΔL_1 . If the company would reduce the number of workers from $L_0 - L_2$, with a value of ΔL_2 , then real wage would increase from $SR_0 - SR_2$, with ΔSR_2 and equilibrium point would then be E_2 . In conclusion, the only way to achieve a real salary close to SR_0 would be by increasing the number of employees with ΔL_2 .

The area above the curve P_{MgL} expressing the excess real salary above the marginal product of labor. It requires a reduction in the level of employment, until it reaches the level L_0 .

In Figure 1 we note that at the level of a given wage, the workforce demand of firms is illustrated by the P_{MgL} curve, and the profit is maximum for a level L_0 of the employment. This is considered the optimal level of employment, i.e. the level at which the marginal product of labour equals the real wage: $P_{MgL} = SR$.

B. Labour supply

Labour supply is the result of work that can be done in terms of salary in a given period of time. It does not comprise housewives, students, soldiers and others which make unpaid activities or do not want to be hired

because they hold resources for livelihood. The supply comes from the active population (labour force) and comes as the number of those seeking a paid job.

The total population of a country = active + inactive population
 population (over 15 years) + population below 15 years

Active population = employed population + unemployed

Employed population = employed persons + other categories (own-account workers, agricultural workers, etc.)

Labour supply presents a series of characteristics in relation to other merchandise supplies:

1. Relatively low space and professional mobility, because of the people that attaches to economic and social environment and that are reticent to changes;
2. Formation of labour supply is created in long-term, whereas the population must attain the legal age of employment and to be able to achieve the relevant professional requirements.
3. High perishability and rigidity of labour supply;
4. Formation of supply not only is subject to the laws of the market, but also to demographic laws.

Factors influencing job offer in an economy are: total population fit for work, the minimum age of employment, wage laws, laws relating to retirement, the population's choice between work and free time.

To determine the number of hours supplied in order to obtain an actual salary we shall take into account the two effects acting in opposite directions:

- The substitution effect which operates by increasing the number of hours offered in order to increase real wage. Individuals tend to substitute leisure time through work;
- The income effect that operates to the contrary; when wage rate per hour increases, the individual gets a higher income for a given number of hours worked. At that point he will be able to consume a greater quantity of goods and services than previously consumed.

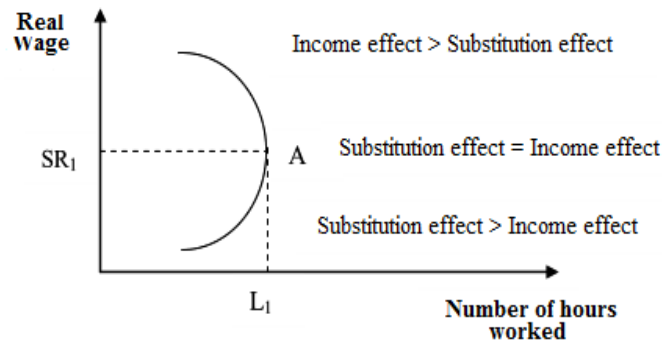


Figure 2: *Atypical curve of labour supply*

Source: Cişmas Laura, 2012, *Macroeconomie. Note de curs.*

In the figure it is noted that above real wage SR_1 , at higher levels of real wages, the slope of the labour supply curve is negative as it generally boils down people's excitement over providing their services.

Job offer is inelastic, the coefficient of elasticity of this offer being less than one. Globally, at the level of the whole national economy, the supply of labor resumes to available active population, i.e. the unemployed population, categories of workforce resources carrying out work or willing to perform work under wages.

A. Labor market equilibrium

The ratio between demand and supply is an essential element which underpins the establishment of equilibrium in the labour market.

Labor demand curve shows the way the amount of work required increases when real wage declines, and the supply curve of labor shows us how supply increases with increasing real wages. Labour demand and supply curves intersect at the point E_q , corresponding to a balance level of employments L^* , causing a maximum level of production Q^* , and a balance real salary SR^* , thus reinforcing the perfect balance of economy in E_q .

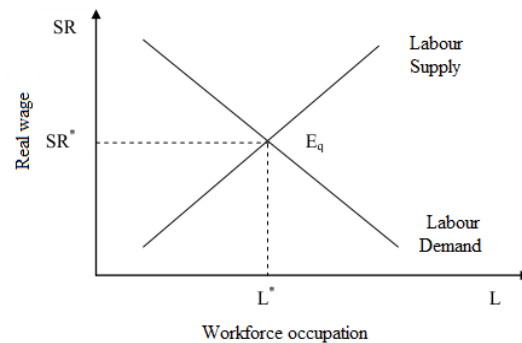


Fig. 3: *The ideal situation of equilibrium in the labour market*

Source: Cişmas Laura, 2012, *Macroeconomie. Note de curs.*

1.4. Indicators characterizing the labour market

Out of the confrontation between supply and demand of labour results a certain level of employment and unemployment. The indicators used to portray labour market potential are expressed in absolute and relative size, which allows for some comparisons between different markets, be they of the same level or of different levels (e.g., regional labour market and the domestic market to which it belongs).

The indicators expressed in absolute magnitude have been characterized when we approached the job offer: the active population, the employed population and the unemployed (unoccupied population). In relative sizes, we define the rates:

- Activity rate (or participation in the labour force) represents the percentage of the population and the total population aged 15 years and over, by expressing in fact participation rate of the population in this age range to the the formation of labor.

- Employment rate the percentage ratio between characterize employed population and the total population aged 15 years and over. Active population consists of employed population and the unemployed, it is evident that the activity rate is higher than that of employment.

- ILO unemployment rate (International Labour Office) is the percentage ratio between the number of ILO unemployed nd active population.

- The unemployment rate, calculated on the basis of the methodology of National Institute of Statistics in our country, represents the ratio as a percentage of the number of unemployed registered at the agencies for employment and active civil population (employed population plus unemployed persons who, according to balance civilian workforce includes people who, in the year of reference, held an economic and social activity bringing income, excluding military personnel and persons treated as such, as well as the employees of the Ministry of Nacional Defence, the Ministry of Internal Affairs, the Romanian Intelligence Service, the staff of political and public organizations and prisoners). [6]

According to the provisions of the law No. 76/2002 on the unemployment insurance system and employment stimulation, registered unemployed persons are persons that meet cumulatively the following situations:

a) are looking for a job at the minimum age of 16 years and until the conditions for retirement;

b) are physically and psychologically suited for employment;

c) do not hold a job, don't realize income at all or are realizing from carrying out authorized activities an income lower than the unemployment aid they are entitled to;

d) are available to start work immediately after they find jobs;

e) are registered at the NEA (National Agency for Employment) or other provider of employment services, which operates in legal terms.

Key indicators in the relative expression of the labour employment in Romania, according to the National Statistics Institute report in 2013, are presented in table 1 below. It is found that both the employment rate and employment rate have experienced a continuous decline from 2000 to 2003,

with a slight upward trend in the next period, which can be related to a large extent to structural changes in the economy. With the entry of Romania into the European Union, the objectives set by the Lisbon strategy also concern the performance of the labour market in our country. The employment rate indicator as a percentage in the population of 15-64 years in Romania recorded in 2007 a value of 58.8% versus 65.4% in the EU-27, 65.8% in EU-25, 66.9% in EU-15, 71.8% in the United States of America and 70.7% in Japan. For 2010, the goal set by the Lisbon strategy is 70% (for the whole Union and not for each individual State, but it is mobilizing for Romania as well). A significant place is occupied by the structural indicators (age structure, education level, occupation, on the activities of the national economy), indicators of persistence of phenomena such as unemployment.

Table 1: Indicators on the labour market in Romania, evolution 2007-2012

	2007	2008	2009	2010	2011	2012	2007-2012
Total Population (15-64 y.o.)	15,046,300	15,042,300	15,028,200	14,999,400	14,967,500	14,928,300	-0.8
Active Population	9,994,100	9,994,600	9,924,200	9,964,600	9,868,000	9,964,100	-0.3
Occupied Population (15-64 ani)	8,842,500	8,882,200	8,804,700	8,822,000	8,750,000	8,885,600	+0.5
Unemployment (-tal)	641,000	576,000	681,000	725,000	730,000	701,000	+9.4
Youth Unemployment (<25 y.o.)	197,000	177,000	197,000	204,000	210,000	189,000	-4.1
Populația inactivă (15-64 y.o.)	5,563,600	5,584,900	5,543,000	5,452,700	5,487,500	5,341,800	-4
Activity rate (15-64 y.o.) (%) of total population	63.0	62.9	63.1	63.6	63.3	64.2	+1.2
Employment rate (15-64 y.o.) (%)	58.8	59	58.6	58.8	58.5	59.5	+0.7
Employment rate (15-24 y.o.) (%)	24.4	24.8	24.5	24.3	23.8	23.9	-0.5
Unemployment rate (-tal) (%)	6.4	5.8	6.9	7.3	7.4	7.0	+0.6
Unemployment rate (<25 y.o.) (%)	20.1	18.6	20.8	22.1	23.7	22.7	+2.6

Source: National Statistics Institute [8]

2. Unemployment-labour market imbalance

2.1. Features of unemployment

Unemployment is characterised by the level, duration and its structure.

a) the level of unemployment

This indicator can be determined both as absolute value, by the number of unemployed, and as a relative size, as unemployment rate (R_s) calculated as a percentage ratio between total number of unemployed (N_s) and the total number of the active or employed population (P_o):

$$R_s = \frac{N_s}{Pa(P_o)} \times 100.$$

The level of unemployment varies according to geographical areas and time intervals, and its limits must be reported to the full employment condition.

Full employment does not refer to the existence of unfilled jobs, but the occupation up to the limit of natural unemployment. This form of unemployment is equivalent to voluntary unemployment, which consists of the number of unemployed, as a result of their decision to cease to work. [1]

The unemployment rate in countries with a market economy is between 3 and 5 percent.

The full employment of labour means the equivalent of low unemployment, natural rate of a few percentage points, meaning the hiring of about 95%-97% of the active population, the difference in available up to 100% is considered to be the normal unemployment rate.

b) the intensity of unemployment

This is another significant feature of this phenomenon, depending on which one can distinguish the following types of unemployment: total unemployment – losing all jobs and total cessation of the activity; partial unemployment - reducing activity of a person, by reducing the duration of the legal work and the corresponding reduction of the salary; disguised unemployment - the work done by some people has a low productivity and a payroll in accordance. It defines the degree of loss of ability to work for those who possess the manpower.

c) Duration of unemployment

The time interval between the moment of loss of employment and the resumption of activity at the time of the previous parameters. It can be defined as an average economy or branch of activity, in a specified period, as follows:

$D_z = N_z/N_s$, where D_z = average duration in days, N_z = number of days of unemployment, N_s = number of unemployed

d) Structure of unemployment

This feature comprises social categories that are affected by this phenomenon, differentiated according to indicators such as: age, gender, ethnicity, occupation, skill level, branch of activity, etc. Young people are more affected by unemployment than adults. In the European Union, the unemployment rate among young people (population 15-24 years old) fluctuates during the years 1997-2007 between 19.6% in 2001 to 14.7 percent, while in Spain it was located, in the same period, between 36.4% and 18.2%. Also, in terms of population 25-54 years old, the rate of employment was almost double that that of the population aged 15-24 years over the same period. Between the years 1997-2007 (ranged between 25.3% and 39.1% in young people 15-24 years old and from 76.8% to 62.1% of population 25-54 years).

Across the EU, unemployment is higher in women than in men. At the extreme, in Spain the female unemployment was 10.9% while the male was 6.4% while in Greece it is more than double 12.8% versus 5.2%.

It has been proved that the majority of unemployed people get into this situation as a result of economic development, not as a result of their desire. In consequence, this phenomenon is rather involuntarily and not voluntarily as claimed in neoclassical theory approach.

2.2. Causes of unemployment. Ways of manifestation

Analyzing the studies and analyses prepared so far, which have as their subject of study the causes of unemployment, we can distinguish two large categories:

1. Subjective causes-the essential structure of the unemployed individual;
2. Objective causes - for example: insufficient economic growth, demographic explosion, reorganization of economic activities.

Two classical forms of unemployment derive from this classification: the voluntary and involuntary unemployment.

The starting point in the characterisation of unemployment is the absence of a place of employment, for a period of time. This situation can be seen from two points of view, idleness may be the result of his individual, on the contrary, one who is fit and willing to work cannot find an available job for reasons beyond his control: unemployment may be voluntary or involuntary.

In practice, voluntary unemployment can be found in the following ways: frictional unemployment and unemployment induced by unemployment allowance itself.

Depending on the objective causes underlying involuntary unemployment, this can be found in the economy in various forms of manifestation: structural unemployment, technological unemployment,

cyclical unemployment, seasonal unemployment and demographic unemployment. [5]

2.3. Unemployment rate at global level

Impacts due to financial and economic crisis continue to be asymmetric on the labour market in 2011, where many regions have had declining unemployment rates, while others have registered an increase of this parameter. [2]. Figure 4 shows the scattering rate of unemployed from 2007 to 2011 having regard to the fact that the effects of the crisis have been unequally distributed over the regions. Belgium recorded the largest dispersion in 2011 of the Member States of the European Union, next to Germany, Italy and Austria. There was a difference in the rate of unemployment among those regions of the EU. For instance, there were much lower values compared to the rest of the states in France, parts of Western Germany and Northern Italy, while they were higher in Vienna against the rest of Austria. The smallest dispersion occurred in Denmark, Greece, Sweden, Portugal and the Netherlands, apart from Greece each of countries reported small values for those unemployed at the regional level, giving proof of homogeneity in this respect.

During the 2008-2011 coefficient of variation of the rate of unemployment fell in many countries in the EU (see Figure 4), with the mention that during this period, the indicator general had a growth or a narrowing for the same region (Czech Republic, Hungary, Bulgaria and Italy).

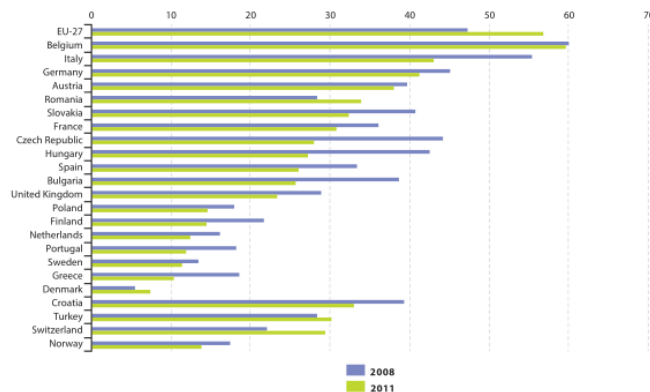


Figure 4. Dispersion of rates of unemployment of persons aged 15-74 years, by NUTS 2 regions, 2008 and 2011

Source: Taken from Eurostat (data code: lfst_r_lmdur) [7]

2.4. Measures for lowering unemployment

Measures that concern directly the unemployed are in the form of: actions of training, qualification and employment reintegration of the unemployed in various branches of activity, as a result of economic and technological modernization; the development of a system to come to the aid of the unemployed who want to become entrepreneurs; facilities provided by the state for the creation of new jobs, especially in areas where high thresholds touches underemployment; the granting of loans to businesses that hire the unemployed; and so forth.

Also, protection of the employed population can come out of the state and employers' efforts to facilitate improvement or retraining of holders of the work force, of those structures that were faced with problems of restructuring.

The most fierce solution for reducing unemployment is economic growth, as a whole, implying a large amount of productive investments in the economy that leads to increasing the number of jobs.

Speciality literature [4] gives us a classification by groups of measures for reducing unemployment and for employment. They will refer to:

- Removal from the labour markets of certain categories of suppliers: restricting immigration, discouragement of female waged labour;
- Ensuring increasing mobility of the working population: improving the education system and ensuring its adequate structures, targeting young people to areas in need of manpower;
- A better allocation of the total workforce fundthrough: reducing pensionable age, increasing jobs with short schedule, extension of compulsory schooling;
- Creation of new jobs on the basis of investment especially in the areas able to develop in the future.

3. Conclusions

Romania is still very far from reaching the EU 2020 goal set by the National Reform Programme where it talks of an employment rate of 70% by 2020. Employment rate in 2011 was 62.8%, and in recent years we have faced serious labour market issues. In the context of the increasing discrepancy compared with the EU average and by looking at current trends, the probability that the target for 2020 will be reached is quite small.

The labour market has been badly affected by the economic crisis of 2008-2009, some of the organizations have been forced to reduce or cease their activities. During the crisis, the number of companies fell by 18.5%, if 2008 there were 554.967 companies in 2011 their number reached 452.010. In the same way, employed population decreased with 15.1 percentage points, i.e. a decrease of 704 thousand persons. The impact of the economic

crisis was felt in all types of organizations as follows: small businesses have seen a reduction in staff of 11%, micro-enterprises have encountered a personal loss of 12.8%, the average enterprises decreased their staffs by 18.2%, while the staff of the large enterprises has been reduced by 17.7%. Fields most affected are trade, construction and manufacturing.

Romania has only recovered in 2011, when there has been an increase of 2.2% of GDP, followed by a slight increase of 0.2% in 2012 due to the rich harvest. In terms of labour market, our country still has serious problems and is hit by a series of faults that affect the coexistence of a dearth of manpower both in some economic activities as well as in some geographical areas. With all these developments, the Romanian economy lingers behind other developing economies across Europe.

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