

CORRELATION BETWEEN UNEMPLOYMENT, GDP, EMPLOYMENT AND INVESTMENT

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Abstract

Development and modernization of a country can not be done only in accordance with changes in the labor market, structural changes and employment. The peculiarities of this process derive from the structure of the economy, performance, and hence economic potential, readiness and multiple possibilities for improving labor. The essential condition for ensuring macroeconomic balance and socio-political stability in any society, is employment. It is a complex, dynamic, real interest for both economic and social partners, to present and future has implications on several levels: economic, psychosocial, educational, cultural and political. Currently, the major objective of economic policy of all countries is to increase the employment of labor and diminishing unemployment.

The labor market in Romania has a degree of instability corresponding general coordinates of the current economic situation. Romanian citizens have assumed new responsibilities, new roles of social, economic and political, and have used skills and experience in a completely different context, resulting from the convergent action of private initiative, competition and social insecurity.

The main problems encountered in the labor market are related to a relatively low participation, particularly from certain social categories of high unemployment among some groups of the population, an internal mobility reduced, a high tax revenues from the use of force labor limited relevance of education to labor market needs and the availability of legal and administrative barriers affecting the operation of companies and therefore job creation. These are causes that reduce employment opportunities for people of working age and contribute to encouraging external migration.

In our country, the low level of economic competitiveness has put pressure on labor, generating a substantial tax in the work. The economic model adopted by Romania, based on labor competitiveness in a context where economic growth no longer generates wealth, catalyzed inequalities in the labor market and they have become increasingly visible. Differences in the labor market are clearly identified between urban and rural areas and between certain economic sectors.

Globalization catalyst for migration, fundamental rights and freedoms impact on the European labor market and demographic decline have affected the number of unemployed in Romania, with it being affected growth.

Tensions on the labor market in Romania including derives from its inefficient management and a non-compliance of supply-demand ratio in terms of skills. Reduced interconnection of labor market institutions (lack of a coherent institutional synergies), a weak correlation between needs and demand in the labor market, with connotations acute in certain regions. We can not talk about the labor market and structural reforms without taking into account the main imbalance that occurs in this market, namely unemployment. One of the main determinants in the analysis of unemployment is the incompatibility between skills available and those demanded by the labor market. Quality of education and job training, the percentage of young people who benefit from this training are factors determining employment young. Unemployment is high in countries where labor is not prepared or qualified.

Key-words: piața muncii, România, salariu minim, șomaj, migrație

Clasificare JEL: J08, J11, J61

Introduction

As the evolution of the national economy generated a significant number of "new" professions and universities were oriented towards training a significant number of graduates we are in a situation where the real need of the labor market correlates increasingly less qualified young specialists.

The labor market can be defined as economic space where trade freely and autonomously users work on the one hand, as buyers and owners of labor resources, on the other hand, as sellers. Adjusted labor market demand with labor supply, both through price mechanism work, and through the mechanism of free competition between economic operators.

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Labor supply are those labor resources, that potential jobs that fall under the category offer the salary criterion. Labor supply is manifested in demand jobs for a sum of money called salary, salary received in accordance with the law. Labor supply or demand jobs are directly influenced by social, demographic options able-bodied people who have legal working age.

Labor, or rather lack of it, is a growing problem present on the agenda of meetings of entrepreneurs, managers and leaders in any industry. Even amid ongoing technological expansion, human resources remain the engine after operating an organization.

The population is a prerequisite for general labor. Statistically speaking population must be analyzed taking into account that it plays a dual role, namely:

- starting point for the establishment of labor resources (labor supply);
- consumer of results of economic activity (the demand for goods and services). This uses a wide range of statistical indicators, indicators reflecting labor resources and structure, labor and employment thereof, unemployment and unemployment rate, labor time, the use of working time, efficient use factor labor (labor productivity) and the correlations established between different categories of indicators. The indicators are calculated labor resources decisions can be relevant economic policy, and comparisons can be made in territorial (comparatiional and international). Both conceptual and methodological content and significance of indicators should be as uniform. Population indicator is the starting point to determine the statistical indicators reflecting the size, structure and use of labor resources.

Labor resources are all people of working age, those individuals who possess physical fitness and / or intellectual disabilities to enable them to carry out useful work in society.

Signs of uncertainty in the economy, primarily related to tax, are reflected in the labor market, where more and more companies and employees regard this year as a challenging one.

1. The actuality of research

In the analysis by addressing the correlation between unemployment, GDP, employment and investment is a novelty, given that an immediate consequence of emigration is the decrease in unemployment in the country of origin, and they are the main indicators that determine emigration. The analysis covered Romanian labor migration, the socio-economic context; specifically, we analyzed the labor market in Romania, focused on social tensions that manifest at this level.

2. Material and methods

The information coming from multiple sources were used, namely: the economic literature; Recent studies of national and international bodies, INS.

3. Experimental results

Ensuring job security and retain key employees through additional benefit packages are the main trends in a market hit hard by lack of personnel and wage competition coming from the public sector. Events on the political scene in the beginning of the year influenced in a significant way business expectations. Thus, in 2018, flexitime, lunch and additional bonuses grew on top concerns, job security has returned among the top entries.

2019 brought many uncertainties in the economy. RON depreciation, expensive credit, tax changes and projections of possible economic slowdown sparked signs of concern among Romanian workers. And the news on the closure of factories in the west and the departure of foreign investors have increased fear that this year, companies will move to crisis measures, from wage cuts and layoffs at the close of business. So it was that many employees to question whether work is safe, stable, and the company they work is solid enough to withstand the challenges. Job security, said the increasing number of respondents has

primarily an aspirational dimension. The experience of the economic crisis showed that, regardless of their career, work in the private sector is not guaranteed to anyone. Job security can be seen only in terms of employees wish to work responsibly, efficiently, hoping that the results will make them indispensable company.

In terms of personal crisis facing the economy for several years in recruiting professionals achieved the same level of importance to business expansion. Despite the expectations of employees, most companies will continue to expand employee benefits. Areas that will attract the most dynamic HR development market this year will be, according to company estimates, IT and retail. Among sectors with the most dynamic market development of human resources, will be and services, medical / pharma, construction sector, support services and industry, including service stations. If last year the construction sector was in the spotlight in 2019 labor demand in this sector is expected to be lower, a phenomenon put in touch with the decisions on the minimum wage in construction and slowdown in the sector, due to lending more expensive.

Results and discussions

Using available data on labor market developments in Romania have built following multiple linear regression model to identify the main factors influencing the influence of unemployment:

$$\text{unemployed}_t = a * \text{GDP}_t + b * \text{occupied population}_t + c * \text{investment}_t + d + e_t \quad (1)$$

Given that unemployment is influenced by other factors that were not taken into account in the model, it proceeded to use e_t variable measuring their influence. Model parameter estimation was performed using the method of least squares. Least squares estimators to compute a, b, c, d that a parameters, b, c, d so as to minimize the function:

$$W = \sum (\text{unemployed}_t - a * \text{GDP}_t - b * \text{occupied population}_t - c * \text{investment}_t - d)^2 \quad (2)$$

The conditions of the optimum result in:

$$\frac{\delta W}{\delta a} = 0 \rightarrow \sum 2 (\text{unemployed}_t - a * \text{GDP}_t - b * \text{occupied population}_t - c * \text{investment}_t - d) (-\text{GDP}_t) = 0 \quad (3)$$

$$\frac{\delta W}{\delta b} = 0 \rightarrow \sum 2 (\text{unemployed}_t - a * \text{GDP}_t - b * \text{occupied population}_t - c * \text{investment}_t - d) (-\text{occupied population}_t) = 0 \quad (4)$$

$$\frac{\delta W}{\delta c} = 0 \rightarrow \sum 2 (\text{unemployed}_t - a * \text{GDP}_t - b * \text{occupied population}_t - c * \text{investment}_t - d) (-\text{investment}_t) = 0 \quad (5)$$

$$\frac{\delta W}{\delta d} = 0 \rightarrow \sum 2 (\text{unemployed}_t - a * \text{GDP}_t - b * \text{occupied population}_t - c * \text{investment}_t - d) (-1) = 0 \quad (6)$$

Solving this equation using the available facts:

$$\text{unemployed}_t = -0,221 * \text{GDP}_t - 0,833 * \text{occupied population}_t - 4,050 * \text{investment}_t + 863.854,4 \quad (7)$$

Conclusions

Following the analysis made, we can formulate the following assessments:

- coefficients of all three explanatory variables considered in the model (gross domestic product, employment and investment) are negative, reflecting an inverse relationship relative to the number of unemployed. Thus, an increase in these explanatory variables causes a reduction in the number of unemployed;
- the constant term in the regression equation is $d = 863,854.4$ and represents the point at which the explanatory variables (GDP, employment and investment) are equal to 0, that is, the number of people unemployed as 863,854.4 if three variables are 0;
- analyzes show the intensity of the relationship between the variables of the coefficient of determination (R^2) is 0.7154, which indicates that 71.54% of the variation in unemployment is determined by three variables: GDP, employment and investment.

Also, we can say that unemployment behaving in inverse proportion to GDP, employment and investment. Romania's economic situation has improved, meaning that unemployment is low, investment and GDP growth; the determinants of migration trends accounting. Emigration continued in proportions consistent, especially temporary migration.

Low unemployment rates amid economic growth, GDP, investment has not stopped emigration. The existence of options on the labor market in Romania does not guarantee to stop labor migration. Need to increase the quality of jobs, matching revenue with quality and cost of living, but also generate wage policies that ensure inclusive labor market are factors that could contribute to halting emigration and would direct coherent labor mobility thus ensuring a correlation between demand and supply of labor.

In the long run, due to a sharp population declines, the effects negatives Romanian labor migration will generate substantial social effects, especially in areas of pension fund or health system and social security.

The sound and effective labor market could offset the demographic risks exacerbated by emigration. In this paper, addressing the correlation between unemployment, GDP, employment and investment is a novelty, given that an immediate consequence of emigration is the decrease in unemployment in the country of origin, and they are the main indicators that determine migration and research limitations arising from the need to identify the extent to which labor market characteristics, quality of jobs, incomes can positively influence migration since simple growth, delivered within the Romanian economy is unable to influence.

Future labor market is a subject in constant debate, but, despite the fact that experts have different opinions about what will be, there is a consensus that education systems should prepare young people for an economic environment characterized by change and uncertainty.

Employers usually show a significant difference in terms of the skills and abilities they expect from young people and skills that they have at graduation.

This situation is exacerbated by the fact that high unemployment among young people, limited learning in the workplace, often young people are growing up without acquiring an appropriate work experience.

We believe that if any country is important to identify those types of measures that can help to attract and retain qualified human resources and creative home. Usually people and especially young people tend to emigrate looking for a place that can provide better living conditions where they can benefit from the current gains and higher incomes. Also people tend to emigrate to benefit from increased opportunities for professional and personal development and management adecavat career and life in general. Knowledge, skills, competencies and experience in addition to the home can be used and adapted accordingly to contrbui increase productivity and ensure a decent living and a quality as good of life to ensure their while and welfare compared with communities in which they left.

Demographic danger that will have to operate the Romanian economy is powered by two elements: one aimed at decreasing population number and the second Romanian labor migration. Despite technological progress enhances productivity through mechanization of production processes, the dynamics of this process is not sufficient to recover the costs of demographic decline. Population aging is a phenomenon demonstrated by the statistics, one strengthened rising trend.

For the future we plan to continue this research and expand the perspective of approach by considering such factors and more complex problems and illustrate the need for policies and factors invoice social, economic and cultural to manage as competent complex problems such the analysis.

Authors'contributions

The author has made an economic analysis of the problem of unemployment was completed by using a multiple linear regression model.

Research limitations

Research limitations arising from the need to identify the extent to which labor market characteristics, quality of jobs, incomes can positively influence migration since simple growth, delivered within the Romanian economy is unable to influence.

Proposals and recommendations

We believe that our research results from a number of proposals imperative for a proper understanding of the effects and impact of emigration. Thus, analyzes aimed at immigration and migration is necessary to take account of labor market flexibility and labor market protectionism, as variables that influence migration flows.

Also features emigration be addressed separately, meaning that permanent migration is weaker in intensity than the short term and their economic impacts to be addressed differently. We would add that it is important in the current context, to identify the economic growth and its characteristics, so that economic growth should be able to reduce labor migration in Romania.

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