STUDY ON LABOUR FORCE - EMPLOYMENT AND UNDEREMPLOYMENT IN ROMANIA IN 2020

Lecturer Ştefan Virgil IACOB PhD (stefaniacob79@yahoo.com) Artifex University of Bucharest Iulian RADU PhD Student (julian@linux.com) Bucharest University of Economic Studies

Abstract

2020 was a year almost entirely affected by the evolution of the growing negative effects of the pandemic and financial-economic crisis. Against this background, the level of unemployment has increased, but especially of the capacity of the national economy to occupy, by creating new jobs, the population that is either unemployed or in the category of the unemployed.

This perspective suggests that the national economy still needs major investment, which has the advantage of creating new jobs, employing the unemployed or unemployed, widening the tax base to achieve income in the country's consolidated budget, and to contribute through the new management, which will be applied, to the improvement of the activity of the companies. In this respect, employment must be a priority, especially in the context of the return to the country of some categories of staff, working abroad and returning home with no external commitments.

In the analysis of this article we used statistical-econometric methods and models, which suggest the difficulties that Romania has in the field of controlling and absorbing unemployment, as well as the decrease of the unemployed labour force.

Keywords: unemployment, labour force, employed and unemployed population, Gross Domestic Product, crises.

JEL classification: C10, J10

Introduction

The economic and financial crisis burdened by the pandemic crisis had special effects on employment. Of course, the active population is the labour force resource, the employed population being the one that found jobs in the existing economic system in Romania.

The purpose of this article is to highlight that on the one hand the number of employees has stabilized and is slightly decreasing due to the crisis

we were talking about, and on the other hand the number of unemployed population is increasing.

In this article we used the data published by the National Institute of Statistics and Eurostat on these two aspects, unemployment and unemployment, aiming to reveal through data analysed this trend of affecting the level of employment.

We used the methodology that the National Institute of Statistics also indicates and that it currently uses, as well as the guidelines and methodological aspects used by Eurostat. As a methodology we used statistical indicators, the system of indices, the method of comparability in time and space, as well as the possibility to interpret structurally and to identify the causes that lead to this state of the workforce and the unemployed population or unemployment.

Literature review

The pandemic and economic-financial crisis has created great difficulties for the evolution of national economies. Romania is fully feeling the effects of this scourge, of unprecedented intensity and with the risk of prolonging in the next period. The restriction of the production of goods and services has determined the reduction of the number of employed personnel, many of them going into unemployment, technical unemployment or losing their jobs. Under these conditions and against the background of the return to the country of some Romanian citizens who worked seasonally, without a legal insurance base, the number of unemployed persons increased. Aspects related to labour underemployment and unemployment have been given attention, domestically and internationally, in the last period of time. In this context, Anderies, J.M. (2003) published a paper on economic and demographic development in parallel with renewable resources in a wellarticulated system. Anghelache, C. (2008) publishes a treatise on theoretical and economic statistics in which, in several chapters, it also addresses the issue of employment and underemployment. The same aspects, approached in detail, we meet in the paper published in 2016 by Anghelache, C. Anghel M.G. Iacob, St.V. and others refer to this aspect in the paper in which they treat through econometric models, the correlation between the evolution of unemployment and the Gross Domestic Product. Joldes, R., Olteanu, E. and Joldes, H. (2006) address in a study the problem of using econometric models for the study and analysis of economic problems, including those related to underemployment and unemployment. Pearsan, M.H., and Smith, R.P. (1985) addressed in a specialized paper the evolution of econometric models applicable to economic issues, also referring to employment and the evolution of unemployment. Yin, J. (2009) deals with the issue of econometric models

in terms of adaptation and application to economic aspects, respectively to employment and unemployment.

Methodology

For an easier understanding of the study undertaken, we will continue to briefly present the main methodological aspects used by the National Institute of Statistics and Eurostat. Thus, underemployed people are employed people who work part-time, who want and are available to work more hours than at present.

As for the additional potential workforce, it represents the sum of two categories of people: those inactive people who are looking for a job but are not available to start work and inactive people who are not looking for a job but are available to start working.

In the same vein, the unemployed are people between the ages of 15 and 74 (years old, at the end of the reference week) who during the reference week were not employed according to the definition of employed persons, were available to work i.e. were available to work occupy a paid job or be self-employed within two weeks after the reference week and were actively looking for a job, i.e. either took concrete steps during the four-week period ending with the reference week to search a paid job or to be self-employed, or have found a job where they are to start work within a maximum of 3 months from the end of the reference week.

Regarding the unemployment rate, this represents the share of the unemployed in the active population. The economically active population includes all persons who provide the labour force available for the production of goods and services during the reference period, including the employed population and the unemployed. The employed population also includes persons aged between 15 and 89 (in full years, at the end of the reference week) who, during the reference week, fell into one of the following categories: persons who, during the week of reference, have worked for at least 1 hour against payment or for a profit, including family workers working for the family business; persons who have a job or an undertaking and who were temporarily absent from work during the reference week but had a formal connection with the workplace, provided that the following groups have a formal connection with the workplace; persons absent from work due to rest leave, organization of working time, medical leave, maternity or paternity leave; persons in vocational training courses for the workplace; persons on parental leave who receive and / or are entitled to income or benefits related to employment or whose parental leave should last for a maximum of 3 months: seasonal workers in the off-season, if they continue to perform regularly

tasks and duties for the job or for the enterprise, excluding the fulfilment of legal or administrative obligations; persons temporarily absent from work for other reasons, if the expected duration of absence is a maximum of 3 months; persons producing agricultural goods intended for the most part for sale or exchange in kind.

As for the estimation methodology, it is based on econometric methods that level exponentially linear data series. The estimated values are derived from data provided by statistical research on labour force in households, based on smoothing coefficients, which correct the level and trend of the series in gross (unadjusted) form. For provisional results, the values are derived taking into account partial data collected for the reference month.

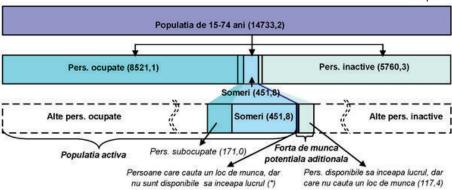
Data, results and discussions

According to data taken from the National Institute of Statistics and Eurostat, we find that the share of underemployed people in the total active population in 2020 was 1.9%, 0.2% lower than in the previous year. Also, the additional potential workforce included 117.9 thousand people, increasing by 1.8% compared to the previous year.

In order to provide a complete picture of the situation and evolution of the labour market, on an annual basis, we further graphically represented the situation of the population, by categories of employed or inactive population.

Population after participation in economic activity

Graph 1



Interpreting the data presented in chart number 1, we find that in 2020, 171.0 thousand part-time employees wanted and were available to work more hours than at present, being considered underemployed. This category of people represented 1.9% of the active population, 2.0% of the

employed population and 29.4% of the total number of people working parttime. Compared to the previous year the number of underemployed persons decreased by 21.6 thousand.

Table 1 and 2 show the situations of underemployment and additional potential labour force in 2020.

Underemployed persons in 2020

Table 1

	Underemployed people									
	- thousands of people -	- % in the active population -	- % in the employed population -	- % in the population part-time -						
Total	171,0	1,9	2,0	29,4						
Male	109,1	2,1	2,2	34,2						
Female	61,9	1,6	1,7	23,6						
Urban	19,9	0,4	0,4	24,8						
Rural	151,1	3,7	4,0	30,1						

Source: INS press release

Additional potential workforce in 2020

Table 2

	Additional potential workforce								
	Total	from which: available people to start work who are not looking for a job							
	- thousands of people -	- thousands of people -	- % in the active population -						
Total	117,9	117,4	1,3						
Male	48,4	47,9	0,9						
Female	69,5	69,5	1,8						
Urban	49,4	49,1	1,0						
Rural	68,5	68,3	1,7						

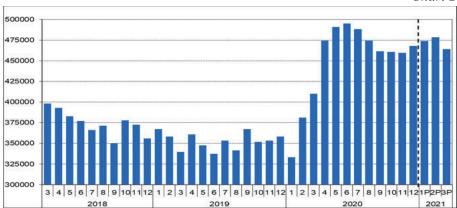
Source: INS press release

Interpreting the structured data in tables numbers 1 and 2 we find that among the inactive population aged 15-74 years, i.e. 5760.3 thousand people, 117.9 thousand people were part of the additional potential workforce (increasing by 2.1 thousand compared to the previous year). Of these, 117.4 thousand were available to start work, but were not looking for a job. In 2020, the percentage ratio between this category of people and the active population was 1.3%. At the same time, only an insignificant number of people, who were part of the potential additional workforce, even though they were looking for a job, were not available to start work.

A difficult to control effect of the pandemic crisis combined with the rising economic and financial crisis is the maintenance of the unemployment rate at alarming levels. Thus, the unemployment rate in March 2021 decreased by 0.2% compared to that recorded in the previous month, respectively 5.7%. Also, the unemployment rate for men was 0.5% higher than for women. Regarding the number of unemployed people aged 15-74 estimated for March 2021 was 464 thousand people, down from the previous month 478 thousand people, but the level is high. Graph number 2 shows the evolution of the number of unemployed between March 2018 and March 2021.

Number of unemployed in the period March 2018 - March 2021

Chart 2



Interpreting the data presented in chart number 2, we find the alarming situation regarding the evolution of the number of unemployed during the onset of the health crisis and the economic-financial one. Table 1 shows the situation of the sex unemployment rate.

Sex unemployment rate (%)

Table 3

	2020							2021					
	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan. ^P	Feb.P	Mar. ^P
Total													
15-74years	4,5	5,3	5,5	5,6	5,5	5,3	5,2	5,1	5,1	5,2	5,6	5,7	5,5
15-24years	18,2	17,0	17,0	17,0	18,0	18,0	18,0	16,0	16,0	16,0			
25-74years	3,7	4,5	4,8	4,7	4,6	4,4	4,3	4,3	4,3	4,4	4,4	4,6	4,4
Male													
15-74years	5,3	5,6	5,8	5,7	5,8	5,5	5,4	5,3	5,2	5,3	5,7	5,6	5,7
15-24years	19,1	17,1	17,1	17,1	18,5	18,5	18,5	16,6	16,6	16,6			
25-74years	4,5	4,7	5,0	4,8	4,8	4,5	4,4	4,5	4,3	4,4	4,6	4,7	4,6
Female													
15-74years	3,5	5,0	5,2	5,4	5,1	5,1	4,9	4,8	5,0	5,0	5,5	5,8	5,2
15-24years	16,9	16,9	16,9	16,9	17,3	17,3	17,3	15,1	15,1	15,1			
25-74years	2,5	4,2	4,4	4,7	4,3	4,4	4,2	4,1	4,3	4,3	4,2	4,5	4,2

Source: INS press release

Interpreting the structured data in table number 3, we find that by sex, the unemployment rate for men exceeded by 0.5% that of women, respectively 5.7% for males and 5.2% for males female.

For adults aged between 25 and 74, the unemployment rate was estimated at 4.4% for March 2021, respectively 4.6% for men and 4.2% for women.

Also, the number of unemployed aged between 25 and 74 years represents 75.1% of the total number of unemployed estimated for March 2021.

Conclusions

The conclusions highlight the fact that in 2020 the economic and financial crisis that has been prolonged and in 2021 will create big problems related to employment. Due to employment and rising unemployment, especially latent, not the expressed, so we have a large number of unemployed people, will have a negative effect on economic growth. The negative effect will also have an impact on the quality of life in that the real incomes of the population will decrease and as a consequence there will be more and more difficulties.

Correlating the level of unemployment, the unemployed population and inflation, we find that for the Romanian population the next period will be

quite difficult, which will lead to reduced real incomes, rising prices and thus great difficulties in solving current problems.

One last conclusion is that the recovery and resilience plan of the European Union needs to be implemented as soon as possible. In this context, the problem arises in order to make major investments, to stimulate domestic investments and also to make a better collection of revenues by ANAF, so as to increase the revenue to the state budget, which ensures possibilities for redistribution of additional amounts of income growth especially in the main branches of the economy. Particular attention must be paid to education, research and health.

References

- 1. Anderies, John M., (2003). *Economic development, demographics and renewable resources:a dynamical systems approach*, Journal of Environment and Development Economics, Cambridge University Press, Volume: 8, Issue: 02 (May).
- 2. Anghelache, C. (2008). *Tratat de statistică teoretică și economică*, Editura Economică, București.
- 3. Anghelache, C. Angel, M.G. (2016) *Bazele statisticii economice*, Editura Economică, Bucuresti
- Iacob, Ş.V., Dumbravă G.Ş., Grigorescu D.L., Măhărea E., Model econometric de studiu a corelației dintre evoluția numărului de şomeri şi Produsul Intern Brut, Revista Română de Statistică - Supliment nr. 4/2020, pp118-129
- Joldes, R., Olteanu, E., Joldes, H. (2006). Using econometric models for solving economic issues. The computer assisted approach, International Conference on Theory and Application of Mathematics and Informatics ICTAMI, Acta Iniversitatis Apulensis, nr.11.
- 6. Pesaran, M.H., Smith, R.P. (1985). Evaluation of macroeconometric models, Economic Modelling, 2(2)
- 7. Yin, J. (2009). Econometric model of underground Economy Scale Estimation, International Journal of Nonlinear Science.