ROMANIA: UNIVERSITY GRADUATES BETWEEN EMPLOYMENT AND UNEMPLOYMENT

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Abstract: Over the years, European countries, including Romania, have tried to reduce unemployment and increase the number of university graduates. The quality and attractiveness of higher education play an important role because a solid university education can be the path to a successful career and a secure financial life. In the last decade, was intensified efforts to convince Romanian people to pursue a specialization at least to the bachelor's level. Except 2005, the number of university graduate women is higher than men, which shows their confidence in university education programs. The counties of Bucharest, Iasi, Clui-Napoca, Timis and Constanta between 1996-2018 have the highest number of university graduates, and these counties also host the best universities in Romania. The quality of higher education must be in line with the personal aspirations of students and national targets. The attractiveness of Romanian university programs is demonstrated by the growing number of foreign students, especially from Arab countries and Africa. But a university education is just one piece of the puzzle, it is also vital to integrate graduates into the work field. Unemployment is one of the vulnerabilities that significantly affects young people. In 24 years, the number of unemployed aged between 30-39 years with a university degree was 98.796, a proportion of 36% - 64% in favour of women (63.078). Women still face great difficulty in finding a job even though they have a university degree. The lowest percentage of unemployed with a university degree in the number of university graduates were registered in 1995 (1.15%) and the highest in 2010 (6.06%). The lowest number of unemployed with university degree among the regions was registered in the North-West (68.989).

Keywords: unemployment; university education; university graduates

JEL Classification: I21; I23; J60

1. Introduction

The unemployment rate and the number of graduates with higher education are topics that represent interest for both Romania and the European Union. The specialized literature offers us analyses such as the dynamics of the number of graduates of Romanian universities in the period 2005-2010 (Popovici, 2011); youth unemployment rate between 2009 - 2011 in the European Union and implicitly in Romania concluding that young people with university education in Romania have more difficulties in finding a job than in other Member States (Boajă, 2011); the risk of exclusion from the labour market of young people aged between 15 and 24 in Bihor County (Chipea, 2011); the divergence between the higher

education system and the Romanian labour market between 2009 - 2010 (Stanciu, Banciu, 2012); the causes of unemployment among young people in Romania and the measures that have been taken to combat them. (Barbulescu, 2012); the loss of a highly qualified labour force and the associated loss of economic potential, the motivation of migration of young Romanians based on a survey conducted in May-June 2012 among graduates of higher education (Vasile, 2012); the dynamics of economic growth taking into account indicators such as the number of students, unemployment, investments in research and development, population and migration in seven Romanian cities, namely: Braşov, Cluj, Constanța, Craiova, Iași, Ploiești and Timișoara in the period 1996-2010. (Berea et al., 2014); regional macroeconomic analyzes on the number of unemployed with higher education and the difficulties in integrating graduates on the labour market in Romania. (Simionescu, Naros, 2019)

2. Methodology

The purpose of this article is to identify the relationship between higher education graduates and the unemployment rate. Studying the evolution of unemployment, I propose to highlight the fact that in the regions where the number of graduates with higher education is significant, the unemployment is lower. Even if a massive number of college graduates can generate the phenomenon of over-qualification, which is often a barrier to employment both from the perspective of the employer who expects a staff turnover and high salary demands and from the perspective of employees who face a feeling of frustration, however, this phenomenon is smaller in Romania. Young Romanians more easily accept a job below the level of qualification, either because their financial situation is precarious or because they hope that, once employed, they can access more suitable jobs for their qualification. Research methods used in this article are techniques such as scientific observation, documentary analysis, data analysis and conclusions. Data on the number of the unemployed, unemployment rate and the number of graduates with higher education in Romania between 1996-2020 were collected from the website of the National Institute of Statistics.

3. The number of university graduates

Education is important for everybody. A solid university education can be the path to a successful career and a secure financial situation. In Romania between 1996 – 2018, a total of 14.302.557 persons obtained a university degree, with 404.875 more women than men. The highest number of 784.958 graduates (365.564 male and 419.394 female) was registered in 2007. Unfortunately, at the time of writing the article, we still do not have definite data for 2019 and 2020. As we can see from figure 1, years in which the number of graduates exceeded the threshold of 700.000 were 2004 (722.635), 2007 (784.958), 2008 (739.432) and 2009 (704.172).

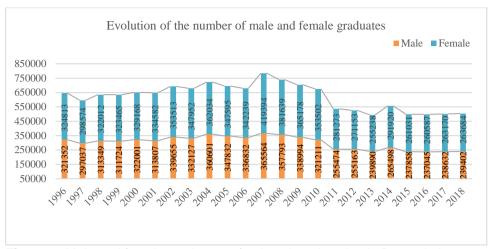


Figure 1: Male and female graduates of university education in Romania between 1996 - 2018

Source: created by the author, based on calculations performed on INS data

The decrease in the population's income during the crisis has led many potential students to reconsider their professional development. Except for 2015, the number of female graduates is higher than men, which shows that they give more importance to a university degree than men. Years between 2003 - 2010 was beneficial for Romania because a multitude of foreign students came to obtain a diploma at Romanian Universities: 2003 (1049 male, 862 female); 2004 (980 m., 732 f.); 2005 (862 m., 817 f.); 2006 (669 m., 807 f.); 2007 (1072 m., 1481 f.); 2008 (990 m., 948 f.); 2009 (948 m., 962 f.) and 2010 (1.115 m., 1.040 f.). But overall, more male than female foreign students accumulate knowledge and implicitly obtain a certificate at the universities. The programs that manage to attract large numbers of foreign students are within the Faculties of Medicine, the Faculty of Architecture and the Faculty of Engineering. The specializations of these Faculties are still men dominated. For example, the Polytechnic University of Bucharest trains an average of 1.000 foreign students, most from Arab countries.

The situation by counties between 1996 - 2018 is showing that the highest number of graduates were registered in Bucharest (1.993.282 graduates), the best year being 2007 (140.084 graduates) and 2013 the unfavourable with just 60.866 graduates. This is not a surprise because we are talking about the capital which over the years had an average population of 2.465.328. Most of those who come for studies stay in the city because the possibility of finding a well-paid job is high, 25% above the national average.

The second place is occupied by Iaşi county with some 712.058 graduates, on average 30.959 graduates. The possibilities offered by the city of Iasi is attractive for the inhabitants of the North-East regions. Those in the city of Iaşi earn on average 15% more than the national average. Due to the proximity of the Republic of Moldova, on average 60.000 citizens (60% students) from the Republic of Moldova residing in Iasi County.

Cluj county is in third place with 612.544 graduates, the lowest number obtained in 2013 (22.076 graduates) and the highest in 2007 (34.666 graduates). There are 11

universities in Cluj-Napoca, six public and five private. We must not forget that the universities in Cluj-Napoca offer lines of study in Romanian, Hungarian, German, English and French. Only at the University of Medicine and Pharmacy "Iuliu Haţieganu", annually come 600 foreign students. In fourth and fifth place are the Timiş counties (533.783 graduates) and Constanţa (520.482 graduates) who manage to obtain over 500.000 graduates in 22 years. We must not forget that based on World University Rankings the best universities in Romania are Babeş-Bolyai University located in Cluj - Napoca, Alexandru Ioan Cuza University located in Iaşi, the University of Bucharest, Grigore T. Popa University of Medicine and Pharmacy located in Iaşi, and the West University of Timişoara. (World University Rankings 2016, 2017, 2018) The lowest value among the counties was registered in Giurgiu (111.968 graduates), with the highest value in 2004 (5.948 graduates) and the lowest in 2018 (3.864 graduates).

The quality of higher education must be in line with the personal aspirations of students and national targets. Romanian universities are constantly trying to align with European and international requirements and expectations. However, the number of registered unemployed entitled to money with a university degree between 1996 - 2018 is significant. The highest value was recorded in 2009 (41.616 people), the lowest in 2018 (6.982 people), and since 2011 is taking place a steady decline.

4. Unemployment evolution in Romania

The highest percentage of the unemployment rate was registered in 1999 (11.8%) and the lowest in 2019 (2.9%). The North-West region (counties: Bihor, Bistriţa-Năsăud, Cluj, Maramureş, Satu Mare, and Sălaj) manage to record the highest value of the unemployment rate in 1999 (10%) and the lowest in 2019 (2%). The region focusing on job creation and employment. Bihor county manages to register the maximum unemployment rate in 1999 (6%) with 5.8% less than the national rate and the minimum rate in 2019 (1.4%) with 1.5% less than the national rate. In the Center region (counties: Alba, Braşov, Covasna, Harghita, Mureş, and Sibiu) the highest value was registered in 1999 (11%) and the lowest in 2019 (2.6%). The region values are above the national values from 2002 (9%, by 0.6% more than the national value) until 2014 (5.5%, by 0.1% more than the national value). Mureş and Braşov's counties register values lower than the national rate in 13 and 14 years. In the North-East region (counties: Bacău, Botoşani, Iaşi, Neamţ, Suceava, and Vaslui) the highest value is registered in 1999 (14.9%) and the lowest in 2019 (4.3%).

The general values of the regions are above the national values in every year. In the South-East region (counties: Brăila, Buzău, Constanța, Galați, Tulcea, and Vrancea) the highest value of the unemployment rate is registered in 1999 (13.2%) and the lowest in 2019 (4.2%). The general values of the regions are above the national values in every year. In the South - Muntenia region (counties: Argeş, Călărași, Dâmbovița, Giurgiu, Ialomița, Prahova, and Teleorman) the highest value is registered in 1999 (11.8%) and the lowest in 2019 (3.4%). The general values of the regions are above the national values since 2001. The Bucharest - Ilfov region (composed of Bucharest and Ilfov) registered the highest value of the unemployment rate in 1999 (6.9%, 4.9% below the national rate) and the lowest in 2019 (1.1%, 1.8% below the national rate). The general values of the regions are

below the national values in each year from 1996 to 2020. The South-West Oltenia region (counties: Dolj, Gorj, Mehedinți, Olt, and Vâlcea) registered the highest value in 1999 (11.7%) and the lowest in 2007 (5.1%). The general values of the region are above the national values except for 1996 (6.5%, 0.1% less than the national level) and 1999 (11.7%, 0.1% less than the national level). In the Western region (counties: Arad, Caraș - Severin, Hunedoara, și Timiș) the highest value of unemployment rate was registered in 1999 (12.6%) and the lowest in 2019 (2.6%). The region values are above the national values in three years 1998 (10,6%, by 0.2% more than the national value) 1999 (12.6%, by 0.8% more than the national value) and 200 (9.5%, by 0.7% more than the national value). Between 1996-2018, neither Arad county nor Timișoara county registered values above the national unemployment rate.

4.1. Unemployed with university degree

Those who complete a university specialization hope to find quick a stable and well-paid job in their field. However, a significant number of graduates are unemployed in Romania. The highest number of unemployed people with a university degree was registered in 2009 (41.616 people) and the lowest in 2019 (6.887 people). The trend from 2009 is declining, which is a positive evolution. The general number of unemployed women with a university degree is higher than that of men, between 1996 - 2019 were a total of 266.359 (58%) women and only 189.962 (42%) men. The lowest percentage of unemployed with a university degree in the number of university graduates were registered in 1995 (1.15%) and the highest in 2010 (6.06%), as we can see in figure 2.

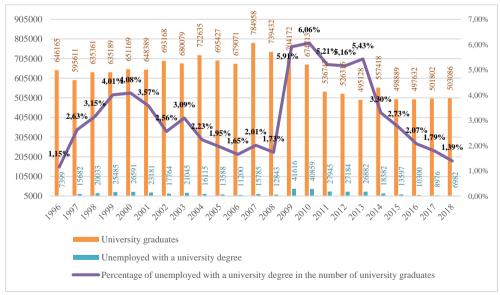


Figure 2: Percentage of unemployed with a university degree in the number of university graduates between 1996 - 2018

Source: created by the author, based on calculations performed on INS data

Unemployment is one of the vulnerabilities that significantly affects young people. The number of unemployed aged under 25 years with a university degree between 1996-2019 was 115.296, 40.094 men, and 75.202 women. The highest number of women was reached in 2009 (7.308) and the lowest in 2018 (403). Those aged between 25-29 years are in fourth place regarding the unemployed with a university diploma, more precisely 86.973 people, of which 53.901 (62%) women and 33.072 (38%) men.

In 24 years, the number of unemployed aged between 30-39 years with a university degree was 98.796, a proportion of 36% - 64% in favour of women (63.078). Among those aged between 40-49 years, we are talking about some 90.406 unemployed with a university degree, 10.320 more women than men (40.043). In the category of those aged between 50-55 years, some 40.754 unemployed with university training were registered. It is the age category in which the number of men (22.251) is higher than that of women (18.503). Through those over 55 years, we are talking about some 24.096 unemployed people with a university degree, 5.312 women and more than three times as many men (18.784). Between 1996 - 2019, the North-West region registered 68.989 unemployed people with a university degree. The lowest value among the regions. The situation in the counties that forming the region was the following: Bihor 14.848 unemployed, Bistrita-Năsăud 6.992, Cluj 21.918, Maramures 13.265, Satu Mare 5.099, and Sălaj 6.867. The Central region record some 74.650 unemployed, the highest number in Brasov county (22.484) and the lowest in Covasna county (3.969).

The North-East region has the highest value among the regions, 87.290. On the first place is Iaşi county 19.171, on the second place Bacău county 17.257, on the third place Suceava county 16.575, on the fourth place Neamt county 15.291, on the fifth place Botoşani county 10.434, and on the last place with the lowest value Vaslui county 8.562. 69.352 unemployed people with university training were registered in the South-East region, the highest values in Constanța (19.069) and Galati counties (19.058), and the lowest number in Tulcea county (4.039).

The counties of Sud-Muntenia regions over the years record some 77.532 unemployed with a university degree divided as follows: Argeş county 23%, Călărași county 5%, Dâmbovița county 16%, Giurgiu county 4%, Ialomița county 6%, Prahova county 31%, Teleorman county 15%. The Bucharest - Ilfov region report the second-highest value among the regions 84.948. Adding the number of unemployed in the five counties of the South-West Oltenia region, we receive the result of 84.821 people between 1996 – 2019, divided thus: Dolj 33%, Gorj 23%, Mehedinți 11%, Olt 14% and Vâlcea 19%. The number of unemployed people with higher education in the West region reaches 69.204. Most of them are registered in Hunedoara (24.842) and Timiş (21.940) counties.

5. Conclusions

Romanians believe in the importance of education, nothing shows this better than 14,302,557 university diplomas issued in the period 1996-2018. Out of the desire to attract as many students as possible, universities are constantly improving the educational offer. The effort made over the years has been rewarded with the fact that since 2016 five universities in Romania are listed in the world university ranking. Most graduates are in the big cities where a famous university operates,

and most of them find a job in these cities after graduation. Bucharest, Constanţa, Cluj-Napoca, Iași and Timișoara are the cities with the best values. At the opposite pole are the counties like Giurgiu, Covasna and Tulcea, which in the absence of famous universities fail to attract a significant number of students and future employees.

In the last fifteen years, there has been a gradual change, so that the number of female graduates has become higher than the number of male graduates, as women see in university education the path to a well-paid job. However, women with a higher education degree find it more difficult to find a job than men. More and more foreign students choose to study in Romania because tuition fees are lower than in other countries, and courses and teaching are of European level.

References

- 1. Barbulescu A.P. (2012), *Youth unemployment in Romania and measures to combat it*, in Procedia Economics and Finance, No.3, pp. 1196-1201
- 2. Boajă D. M. (2011), Youth unemployment rate In European Union. Regional approach-Romania, in Annals of the University of Craiova, Economics Series, Vol.1, 39, pp. 1-6
- 3. Berea C. B., Otoiub A., Bucerzan P. I. (2014), *Determinants of economic growth in cities acting as growth poles in regions from Romania*, in Procedia Economics and Finance, Vol. 10, pp. 357-365
- 4. Chipea F. (2011), *Riscuri de excluziune pe piaţa muncii din România a grupului de tineri de 15-24 de ani*, in Sociologie Românească, Vol.9, No. 4, pp. 45-67
- 5. Manea, N. P. (2014), *The analysis of perception of master students regarding the quality of educational services of Bucharest universities*, in Procedia Economics and Finance, 15, pp.746-751
- 6. Popovici A. (2011), The dynamics of the Romanian universities graduates number in the 2005-2010 period, in Annals of Faculty of Economics, Vol.1, No.2, pp. 193-199
- 7. Simionescu M., Naroş M. S (2019), The Unemployment of Highly Educated People in Romania. A Panel VAR Approach, in Studia Universitatis "Vasile Goldiş" Arad, Economics Series, Vol.29, No.3, pp. 20-37
- 8. Stanciu, S., Banciu, V (2012), Quality of higher education in Romania: are graduates prepared for the labour market? in Procedia-Social and Behavioral Sciences, 69, pp. 821-827
- 9. Vasile V. (2012), Crisis impact on employment and mobility model of the Romanian university graduates, in Procedia Economics and Finance, 3, pp. 315-324
- 10. Instituțul Național de Statistică (INS) Online: https://insse.ro/cms/ [Accessed: 16.04.2021]
- 11. World University Rankings 2016, 2017, 2018 Online: https://www.timeshighereducation.com/world-university-rankings, [Accessed: 16.04.2021]