

Labor market assessment and the role of education in the period 2022-2023

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Abstract. *Improving labor market conditions is very important in creating a productive, fair and attractive work environment for employees and employers. A theoretical framework on effective employment is essential to understand how the recruitment, integration, development and retention processes of employees can be optimized. It can be built on several fundamental concepts and theories in the field of human resources management, organizational psychology and sociology of work. This study analyzes data from the years 2022 and 2023, respectively, from the National Employment Agency (ANOFM) database, which are the basis for developing employment strategies. The methodology consists of a qualitative and semi-quantitative analysis of data taken from the ANOFM website for the years 2022-2023. The main conclusion of this article is the situation at the end of 2023, where an employment rate of 88% was achieved, compared to the previous year, and this percentage shows the first negative signs following Covid-19. The main limitation refers to the availability of data series.*

Keywords: digitalization of education, labor market, equal opportunities, efficient collaboration, ANOFM.

Introduction

Effective employment can be influenced by numerous factors, including personal organization, time management, adaptability, and collaboration, to maximize performance and job satisfaction. The theoretical framework for effective employment is essential to understand how to optimize the recruitment, integration, development, and retention processes of employees. It can be built on several fundamental concepts and theories from the fields of human resource management, organizational psychology, and work sociology (Byshevets & Lazakovych, 2023; Nygren et al., 2023).

A theoretical framework can include the following essential concepts: Person-Environment Fit Theory, which suggests that job satisfaction and performance are high when there is a fit between the characteristics of the person (skills, values, interests) and the requirements of the job or organizational culture. Through practical involvement, it is possible to identify the skills and values of candidates in relation to the requirements of the job (Bustamante & Vilorio, 2021; Byshevets & Lazakovych, 2023; Marius et al., 2016; Nygren et al., 2023). The second theory, that of motivation (Self-Determination Theory - SDT) is the key to effective employment. It involves satisfying the needs for autonomy, relatedness and competence. Through practical involvement and creating an environment that stimulates employee motivation and confidence (Byshevets & Lazakovych, 2023; Nygren et al., 2023; Shahzad et al., 2024; Zhang et al., 2024).

Theory number three is the Job Demands-Resources (JD-R) model which focuses on the balance between job demands and the resources provided. Increased demands, such as time

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pressure, can generate stress if they are not compensated for by sufficient resources such as managerial support, training, or rewards. Through practical involvement, stress factors can be reduced and adequate support provided (Byshevets & Lazakovich, 2023; Nygren et al., 2023). The fourth theory of human capital focuses on employees who are seen as strategic investments of the organization by developing their skills and abilities and adding value to the organization. Practical involvement can be represented by training and continuous development programs (Byshevets & Lazakovich, 2023; Cioca et al., 2019; Hinoveanu et al., 2023; Laub, 1999; Nygren et al., 2023). The fifth theory is Equity Theory, which is the perception of fairness in the workplace and influences employee satisfaction and motivation. Comparing rewards with effort is essential.

The paper is structured around two main objectives: job market and professional strategies, both for people with secondary education and for higher education graduates that form the basis for the development of employment programs. The structure of the article includes the role of education in adapting to the labor market, through various training courses. The need for this study is found in the idea that the discrepancy between the demand and supply of skills is quite large. The education system must evolve rapidly to reduce the gap between the skills of graduates and the requirements of employers. Unequal access to education produces socio-economic and geographical differences that continue to affect learning and employment opportunities. The adoption of modern teaching methods and the integration of technology into the educational process are essential for the future of the workforce (Banaduc et al., 2022; Epuran et al., 2015; Suslenko, 2023). The period 2022-2023 highlighted the need for an adaptable and well-trained workforce. Education plays the most important role in ensuring economic competitiveness, and investments in continuous training and digitalization are essential for long-term success.

Literature review

In order to create a comprehensive theoretical framework for improving conditions in the labor market, but also in education, it is important to draw a well-defined structure that links important theoretical and practical aspects.

The main criteria are (Byshevets & Lazakovich, 2023; Istrițeanu et al., 2022)

- ✓ The general context of the labor market and education in today's society;
- ✓ The importance of the relationship between education and labor market requirements;
- ✓ Identifying and analyzing factors that can contribute to improving conditions between these areas

In addition to these criteria, factors influencing the labor market and education can also be mentioned. These factors are:

- ✓ Economic factors, which represent the development of emerging economic sectors such as IT or renewable energy.
- ✓ Social factors, which are represented by demographic changes and their impact on the labor market, but also by cultural diversity and social inclusion in education and employment.
- ✓ Technological factors, which represent the impact of digitalization on jobs, as well as the adaptation of the education system to new technological requirements, such as digital skills (Banaduc et al., 2022; Byshevets & Lazakovich, 2023; Istrițeanu et al., 2022).

To improve conditions in education and the labor market, three practices have been created, namely: education reforms, labor market policies, and the digitalization of education.

- ✓ Education reforms represent the updating of curricula to meet labor market requirements. Promoting dual education and partnerships between academia and the economy, as well as developing soft skills (creativity, resilience, leadership) among students (Epuran et al., 2015; Suslenco, 2023)
- ✓ Labor market policies support the transition from academia to the economy, towards employment through internship and vocational training programs. A series of active measures are taken to employ the workforce through retraining courses or incentives for employers, as well as respecting employee rights and improving working conditions (Epuran et al., 2015; Suslenco, 2023).
- ✓ Digitalization of education can be achieved by creating online platforms for continuous learning, but also by implementing teleworking solutions and program flexibility.

All these measures help to develop a more stable and competitive labor market, with benefits for both employees and the global economy (Epuran et al., 2015; Suslenco, 2023).

Methodology

This study analyzes data from the years 2022 and 2023, respectively, from the National Employment Agency (ANOFM) database, which are the basis for the development of employment strategies. The methodology consists of a qualitative and semi-quantitative analysis of data taken from the ANOFM website for the years 2022-2023. The main conclusion of this article is the situation at the end of 2023, where an employment rate of 88% was achieved, compared to the previous year, and this percentage shows the first negative signs following Covid-19. The main limitation refers to the availability of data series.

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Results and discussion

As a result of the application of employment stimulation measures for the county and Bucharest municipality employment, in 2022, approximately 215,948 people were employed on the labor market (approximately 44% of the 493,698 people who benefited from specialized employment services or were included in stimulation measures), (AJOFM), Table 1.

Table 1: Structure by level of employability

The structure by employability level of the 215,948 employed people	
37.158 of people	easily employable
82.579 of people	medium employable

68.899 of people	hardly employable
24.477 of people	very difficult to employ
2.835 of people	other categories of people who are not profiled (other than the unemployed)

Source: ANOFM

These measures of job mediation, information and professional counseling, as specialized services offered by the public employment service, have a significant share in the total of the measures that led to their employment. In order to qualify, a person registered in the records of the National Employment Agency participates in several active measures, applying a personalized package depending on their skills, capabilities and professional level. Thus, a person can be highlighted both for job mediation, information and professional counseling, as well as for professional training or for one of the subsidy measures, but in total, however, being highlighted only once (Epuran et al., 2015). Within the framework of job mediation services, an important role is played by job exchanges organized with the aim of ensuring the direct meeting of labor supply and demand, Figure 1. Territorial employment agencies organize general exchanges, but also exchanges at the request of the labor market (Banaduc et al., 2022; Epuran et al., 2015)

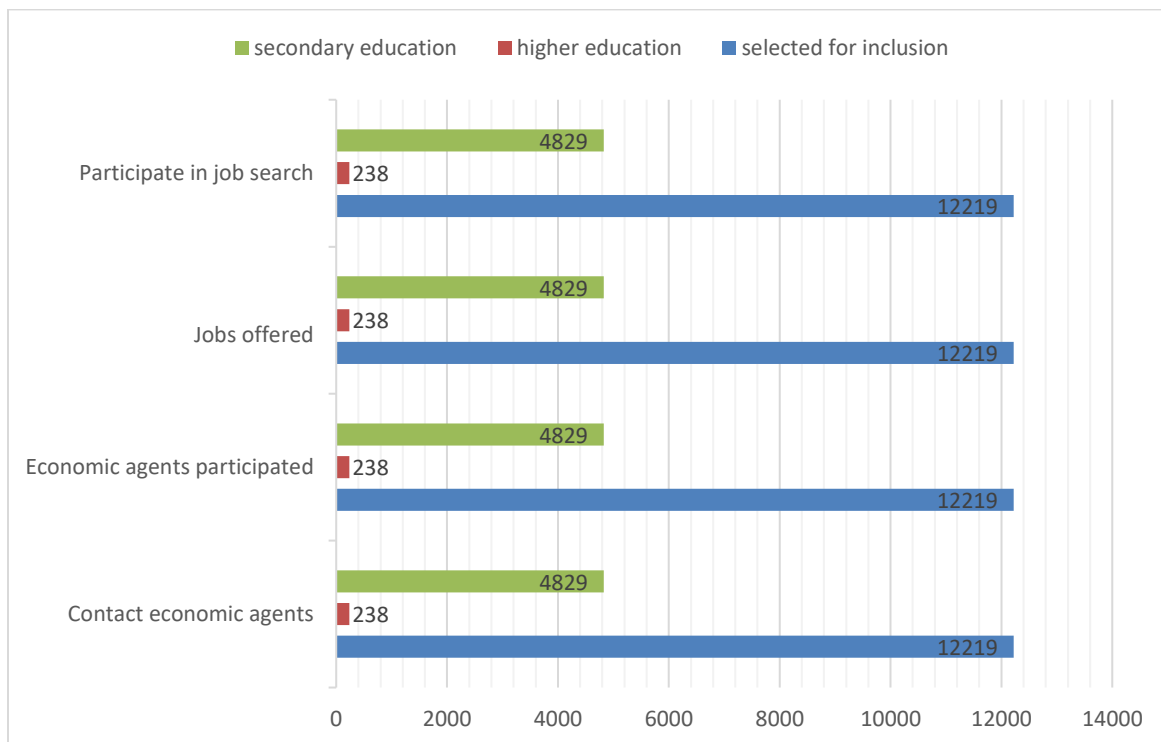


Figure 1. General Job Fair, organized on May 20, 2022

Source: ANOFM

Following this analysis of the general job exchange, it can be seen that in 2022, 19,668 economic agents were contacted, but only 2,332 agents participated. 40,101 jobs were offered and 32,244 people participated. Finally, 12,219 people were selected for employment, of which 43 were people at risk of social marginalization. Out of 5,061 people employed, 238 were people with higher education, and 4,829 were people with secondary education (ANOFM).

According to the provisions of Law no. 335/2013 and the Methodological Norms for the application of this law (H.G. no. 473/June 2014), the ANOFM can support professional internships for higher education graduates from the unemployment insurance budget and the European Social Fund (FSE). In 2022, 2 higher education graduates were employed in jobs intended for interns, for whom conventions related to professional internship contracts were concluded. As a result of the application of employment stimulation measures provided for by the legislation in force by the county employment agencies and the Bucharest municipality, in 2023 approximately 190,039 people were employed on the labor market (approximately 38% of the 494,002 people who benefited from specialized employment services or were included in stimulation measures), Table 2.

Table 2: Structure by level of employability

The structure by level of employability of the 190,039 people	
24,039 of people	easily employable
93,867 of people	medium employable
51,302 of people	hardly employable
19,023 of people	very difficult to employ
1,808 of people	other categories of people who are not profiled (other than the unemployed)

Source: ANOFM

Specialized labor mediation and information and professional counseling services have a significant share in the total of measures that led to employment. To qualify, a person registered in the records of the ANOFM participates in several active measures, applying a personalized package depending on skills, capabilities and professional level.

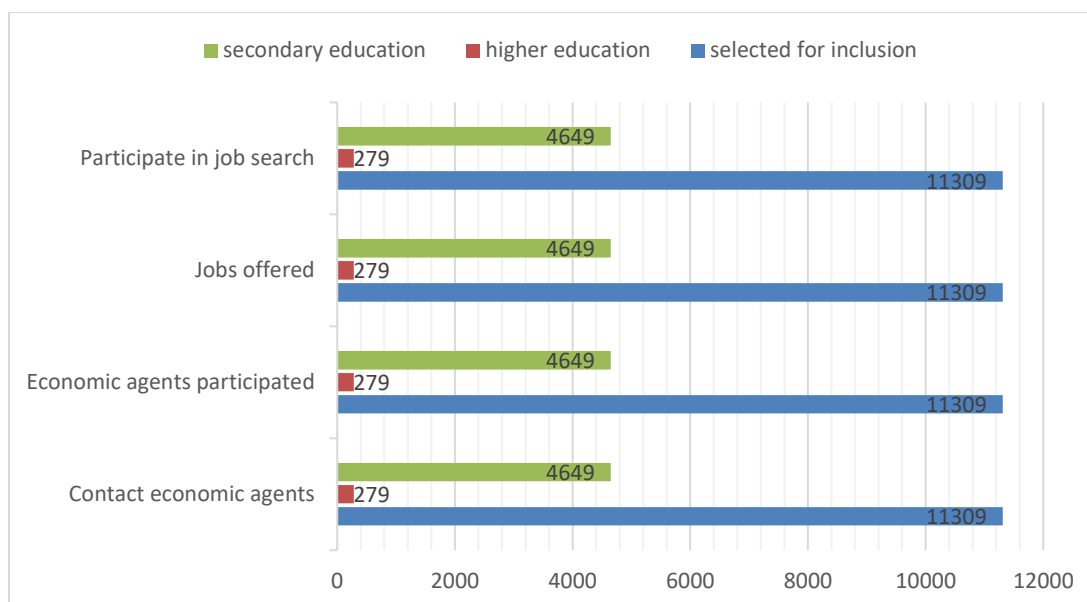


Figure 2: General Job Fair, organized on May 12, 2023

Source: ANOFM

Thus, a person can be highlighted both for labor mediation, for information and professional counseling, as well as for vocational training or for one of the subsidy measures, in total, however, being highlighted only once. Within the labor mediation services, an important role is played by job exchanges organized with the aim of ensuring the direct meeting of labor supply and demand. Territorial employment agencies organize general exchanges but also exchanges at the request of the labor market, Table 4. In this analysis of the general job exchange, it can be seen that in 2023, 23,418 economic agents were contacted, but only 2,070 agents participated. 35,196 jobs were offered and 27,433 people participated. Finally, 11,309 people were selected for employment, of which 11 people at risk of social marginalization. Out of 4,928 employed people, 279 were people with higher education, and 4,649 were people with secondary education (ANOFM).

ANOFM has included in the Employment Program for 2023 a Special Program for pupils and students, which should support the employment of pupils and students for a fixed term, of a maximum of 60 calendar days, during the holidays, in accordance with the provisions of Law no. 72/2007. This aims to accustom pupils and students to work practice and earn income during the holidays, especially those from low-income families. Through this program, it was proposed for 2023 to employ 1,716 people during the holidays, of which: 942 pupils and 774 students (ANOFM), Table 5.

Table 3. Situation of pupils and students in 2023

Dimension	high school students	students
Total	942	774
Convention	75	19
Rural	23	7
Urban	53	12

Source: ANOFM

In 2023, through the implementation of the Special Program for Pupils and Students, the following results were achieved: 35 conventions were concluded under Law no. 72/2007 and 75

high school students and 19 students were employed. Depending on the environment of origin, 52 pupils and 12 students are from urban areas, and 23 pupils and 7 students are from rural areas. The gender structure shows that of the 75 pupils employed, 34 are female and 41 are male, and of the 19 students employed, 5 are female and 14 are male (ANOFM).

Conclusions

The National Employment Program for 2022 established that approximately 215,948 people will be employed on the labor market at the national level, and with subsequent amendments and additions in 2023, it was established that approximately 219,660 people will be employed on the labor market at the national level, Table 6.

In order to increase the employment rate of people from rural areas or people from urban localities who have social reintegration problems as a result of economic restructuring, the ANOFM included the following special programs in the Employment Program for 2022 and 2023:

- ✓ Program 60, specifically for 60 urban localities;
- ✓ Program 156, special for 156 rural localities (2022).
- ✓ Program 160, specifically for 160 rural localities (2023).

The criteria that formed the basis for establishing the localities were:

- ✓ high share of unemployed in total active population;
- ✓ low level of economic development.

Table 4. Establishment and employment in the labor market

2022		2023	
215948 of people		219660 of people	
176220 people – indefinite period	24064 people - fixed period	162396 people – indefinite period	21929 people - fixed period

Sours: ANOFM

By providing employment mediation services, 200284 people were employed, of which:

- ✓ 176220 people were employed in vacant jobs for an indefinite period;
- ✓ 24064 people were employed in vacant jobs for a definite period.

By providing employment mediation services, 184,325 people were employed, of which:

- ✓ 162,396 people through employment in open-ended job vacancies;
- ✓ 21,929 people through employment in fixed-term job vacancies.

The main conclusion of this article is the situation at the end of 2023, where an employment rate of 88% was achieved, compared to the previous year, and this percentage shows the first negative signs following Covid-19. The need for this study lies in the idea that the discrepancy between the demand and supply of skills is quite large. The education system must evolve rapidly to reduce the gap between the skills of graduates and the requirements of employers. The period 2022-2023 highlighted the need for an adaptable and well-trained workforce. Education plays the most important role in ensuring economic competitiveness, and investments in continuous training and digitalization are essential for long-term success.

References

- Banaduc, G., Mirea, N., & Draghici, A. (2022). Points of intersection between sustainability and project management. *MATEC Web of Conferences*, 373. <https://doi.org/10.1051/mateconf/202237300078>
- Bustamante, C. B., & Vilorio, R. (2021). Extent of Sustainability Practices in San Beda University: The Basis for Action Plan Formulation. *Bedan Research Journal*, 6(1). <https://doi.org/10.58870/berj.v6i1.26>
- Byshevets, N., & Lazakovych, Y. (2023). Analysis of movement activity of higher education students in the conditions of distance education. *Scientific Journal of National Pedagogical Dragomanov University. Series 15. Scientific and Pedagogical Problems of Physical Culture (Physical Culture and Sports)*, 5(164). [https://doi.org/10.31392/npunc.series15.2023.5\(164\).06](https://doi.org/10.31392/npunc.series15.2023.5(164).06)
- Cioca, L. I., Ivascu, L., Turi, A., Artene, A., & Gaman, G. A. (2019). Sustainable development model for the automotive industry. *Sustainability (Switzerland)*, 11(22). <https://doi.org/10.3390/su11226447>
- Epuran, G., Dovleac, L., Ivasciuc, I. S., & Tescaiu, B. (2015). Sustainability and organic growth marketing: An exploratory approach on valorisation of durable development principles in tourism. *Amfiteatru Economic*, 17(40).
- Hinoveanu, D., Anastasiu, D. M., Citu, C., Crisan, D. C., Popa, Z. L., Nicolae, N., Dumitru, C., Neda-Stepan, O., Fericean, R. M., & Stelea, L. (2023). Mental Health and Contraceptive Knowledge in High Schoolers: Comparing Remote and In-Person Learning during COVID-19. *Medicina (Lithuania)*, 59(10). <https://doi.org/10.3390/medicina59101876>
- Istrițeanu, S., Băjenaru, V., & Badea, D. M. (2022). ASPECTS REGARDING ECO-INNOVATION PRACTICE AND TRENDS FOR A SUSTAINABLE AUTOMOTIVE INDUSTRY. *International Journal of Mechatronics and Applied Mechanics*, 2022(11). <https://doi.org/10.17683/ijomam/issue11.24>
- Laub, J. A. (1999). Assessing the servant organization; Development of the Organizational Leadership Assessment (OLA) model. *Dissertation Abstracts International, Procedia - Social and Behavioral Sciences*, 1(2).
- Marius, P., Silvia, A., & Lidia, A. (2016). Innovative approach based on fuzzy modeling for ecosystems assessment. *International Multidisciplinary Scientific GeoConference Surveying Geology and Mining Ecology Management, SGEM*, 3(BOOK 4).
- Nygren, J. M., Lundgren, L., Bäckström, I., & Svedberg, P. (2023). Strengthening Digital Transformation and Innovation in the Health Care System: Protocol for the Design and Implementation of a Multidisciplinary National Health Innovation Research School. *JMIR Research Protocols*, 12. <https://doi.org/10.2196/46595>
- Shahzad, M. F., Xu, S., Lim, W. M., Yang, X., & Khan, Q. R. (2024). Artificial intelligence and social media on academic performance and mental well-being: Student perceptions of positive impact in the age of smart learning. *Heliyon*, 10(8). <https://doi.org/10.1016/j.heliyon.2024.e29523>
- Suslenco, A. (2023). Competitiveness through innovation – a pillar for achieving sustainability. <https://doi.org/10.53486/9789975155618.38>
- Zhang, W., Xu, M., Feng, Y., Mao, Z., & Yan, Z. (2024). The Effect of Procrastination on Physical Exercise among College Students—The Chain Effect of Exercise Commitment and Action Control. *International Journal of Mental Health Promotion*, 26(8), 611–622. <https://doi.org/10.32604/ijmhp.2024.052730>
- Website National Employment Agency, available at <https://www.anofm.ro/>