



Analysis of Labor and the Workforce in the National Economy of the Republic of Bulgaria

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Abstract: Human resources are carriers of the working force and reflect directly the invested “live” labor in the activity of economic entities. The subject of analysis in the present study are the economic categories «labor» and «workforce», including their meaning, characteristics, and specifics of their functions. Labor is a specific production factor and as such it is inherent in man as an indivisible part of him. Like a specific human activity, labor fulfills two main functions, namely economic and social. Another issue put under discussion is the state of the labor market and the dynamics of the employed workforce in the economy of the Republic of Bulgaria within the period 2018 - March 2023. The analysis focuses on the changes in the growth of employment and the coefficient of economic activity of the population of the Republic of Bulgaria, the structure of the workforce by age groups regarding the national economy, its geographic distribution within the country, etc. At the end, conclusions and recommendations are summarized.

1. INTRODUCTION

Human resources ensure the unification of the means and products of labour. Human resources are what the labour force is made up of and reflect the work directly put into the activity of an economic entity.

In a broad sense, “...the term human resources refers to the individuals who, at a certain point or period, are employed in the production of goods and services, i.e. the population that can engage in labour.

In the strict sense, the concept of human resources is identified with the concept of an economically active population ([Labour Economics course, 2017](#)).

In the quantitative aspect, human resources are determined by the natural growth and migration processes of the population. In the qualitative aspect, human resources are, among others, characterized by the educational and qualification level of individuals, their professional experience and skills, work activity, and personal and business skills.

For the purposes of statistical analyses, the labour force comprises both the employed and unemployed, i.e. the labour force category also includes the unemployed, but not the economically inactive such as pupils, students and pensioners, housewives or men, provided that they are not working or looking for a job, although some of them may be of working age ([Eurostat, 2020](#)).

The coefficient of economic activity represents the relative share of economically active individuals out of the total population of the country in the respective group ([National Statistical Institute, 2023, p. 36](#)).

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From an individual point of view, labour force is defined as an ensemble of physical and spiritual (intellectual) skills possessed by an individual, through the use of which, he or she is able to perform an activity with a certain degree of complexity, to produce products, perform services, etc.

In the context of the above definition, it has to be clarified that “the specific manifestation of the labour force has its own peculiarities. Above all is its individuality that stands out - for an individual, the set of physical and spiritual powers is too different and specific. Secondly, it is a dynamic category because it changes over time - physical and spiritual powers can increase or decrease. Thirdly, it is characteristic of the labour force that it has a certain professional focus” (Donchev et al., 2003, p. 122).

The quality of the labour force and the work performed are of decisive importance for the successful functioning and development of an organization. Higher-skilled labour is associated with a labour force of higher quality, able to produce products with certain properties demanded by customers and to perform more complex functions and activities.

The quality of the labour force is formed under the influence of two groups of factors: (1) *inherent* - such as talent, inherited abilities, specific skills and aptitudes, and natural endowments of an individual, and (2), *acquired* - formed in the process of education, qualification, specialization and professional self-fulfilment. In general, the labour force quality is determined by the ensemble of the mentioned characteristics complemented by the individual’s personal and business qualities, including self-organization, discipline, self-consciousness, creative initiative, sense of responsibility, efficiency, adaptability, etc.

2. BASIC APPROACHES FOR DEFINING LABOUR

The term labour does not have a simple definition. As a multi-aspect phenomenon, labour is defined in different ways depending on the approach taken, as follows:

- a. *The economic approach* considers labour as the purposeful activity of people to produce goods and services they use to satisfy their own needs. Seen from this perspective, labour is only and solely inherent in human beings (Labour Economics course, 2017).
- b. *The physiological approach* considers labour as a process of spending a certain amount of physical and neuro-psychic energy, which should be brought in line with the mission of ensuring and maintaining the necessary working capacity of the labour force throughout its work life.
- c. *The sociological approach* considers labour as a system of relationships that arise between an individual and an organization (group) in the process of joint activity in a labour microenvironment. The organization coordinates this activity and integrates its members, who are jointly engaged in the implementation of specifically set goals.

Labour is a specific factor of production. It is inherent in human beings and is an indivisible part of them. Labour is an essential and primary source of subsistence income for the majority of the population. In the process of production, labour is repeatedly used in the realization of the potential professional abilities of those who perform it, which are in turn compensated with the income generated from labour.

3. FUNCTIONS OF LABOUR

As a specific human activity, labour fulfills two main functions, namely economic and social, finding expression in the following directions (Kalchev & Valkanova, 2001, p.7):

- a. *The economic function* of labour is expressed in the fact that:
 - i. labour is the creator of the material and spiritual goods necessary for people to exist and develop.
 - ii. labour is the source of the means necessary to satisfy human needs.
 - iii. labour is a factor in the development of the national economy.
- b. *The social function* of labour is expressed in the fact that it represents:
 - i. a means of social communication.
 - ii. a means of self-probation and self-realization of people.
 - iii. a factor and prerequisite for the implementation of various social policies.

4. ANALYZING EMPLOYMENT FLUCTUATIONS: THE BULGARIAN LABOUR MARKET FROM 2018 TO MARCH 2023

The subject of analysis in this section is the state of the labour market and the employment fluctuations in the Bulgarian economy for the period 2018 - March 2023. According to the data provided by the National Statistical Institute (NSI) of the Republic of Bulgaria, the lowest employment rate for the period under consideration is reported in 2021, with the total economically active population numbering 3 147,5 thousand or 72.0% of the country's economically active population (aged between 15 and 64 years). This is a direct reflection of the changes in the working and employment conditions in the context of the global COVID-19 pandemic and the impossibility of exercising many activities and professions. For the mentioned year of 2021, the number of people employed in the country is 7% lower compared to the pre-pandemic year of 2019.

An increase in the country's economic activity is reported in 2022, which is reflected in the increase in the number of people employed in the national economy, reaching as high as 3 290,9 thousand people.

Again, based on data provided by the National Statistical Institute of the Republic of Bulgaria, the first quarter of 2023 saw a sharp decline in the number of people employed in the economy, dropping below 3 million and reaching 2 928 thousand people (Figure 1). Part of the main causes of this unfavourable change for the first quarter of 2023 is the increasing external migration owing to the recovery of the world economy after the Covid-19 pandemic, the drastic political and economic instability in Bulgaria in the period 2021 - 2023, the high inflation rate in the country in 2022, exceeding the average Eurozone inflation rate, geopolitical factors, the intensifying demographic crisis, etc.

Notwithstanding given data, the highest employment rate of the active population in the Republic of Bulgaria was reported in 2022, as for the same year the coefficient of economic activity of the employed exceeds that of the pre-pandemic year of 2019 by 0.4 percentage points, reaching as high as 73.6%. The above increase is an indicator of the recovery of Bulgaria's national economy after the COVID-19 pandemic despite the slow economic growth in times of energy, raw material and price crisis, which is typical for the rest of the Eurozone countries and the global economy as a whole.

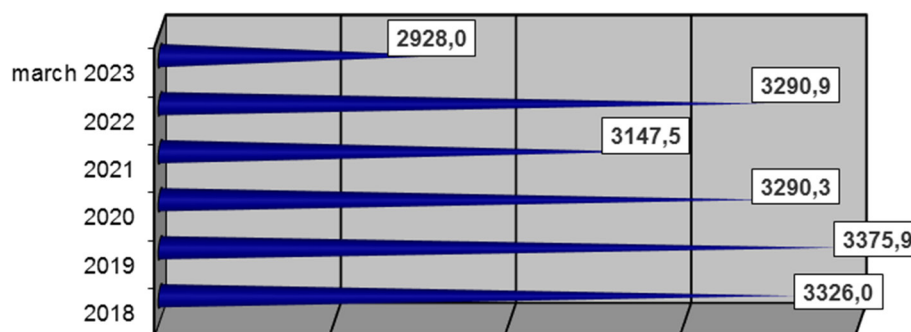


Figure 1. Number of people employed in the Republic of Bulgaria for the period 2018 - March 2023

Source: National Statistical Institute, 2023, p. 37; Investor Finance Forum, 2023

The dynamics in the structure of the coefficient of economic activity (relative share of economically active individuals compared to the total population of the country) in the age range from 15 to 64 years for the period 2018 - 2022 is presented in Figure 2.

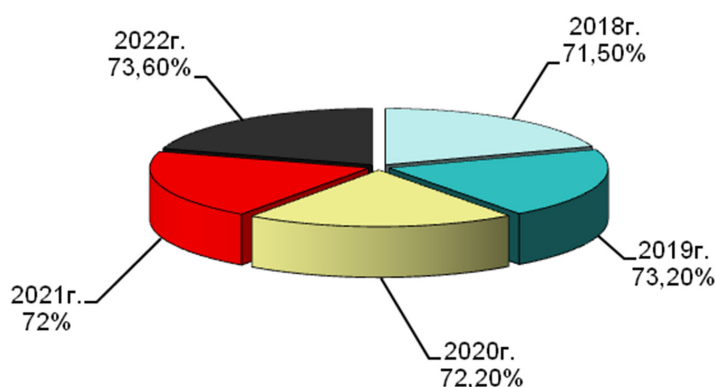


Figure 2. Structure of the coefficient of economic activity of the population of the Republic of Bulgaria for the period 2018-2022

Source: National Statistical Institute, 2023, p. 37

The distribution of the active working population of the Republic of Bulgaria by age group for the period 2018-2022 is presented in Table 1.

Table 1. Age structure of the labour force in the Republic of Bulgaria for the period 2018 -2022

Year	Age Total number	15-24		25-34		35-44		45-54		55-64	
		Number, thous.	%	Number, thous.	%	Number, thous.	%	Number, thous.	%	Number, thous.	%
2018	3239,6	149,3	4,61	719,9	22,20	908,1	28,03	847,8	26,17	614,6	18,97
2019	3276,4	147,8	4,51	718,9	21,94	902,6	27,54	868,5	26,51	638,5	19,48
2020	3190,4	134,1	4,20	675,9	21,19	871,3	27,31	877,1	27,49	632,1	19,81
2021	3155,3	123,6	3,91	658,5	20,87	855,4	27,11	890,6	28,23	627,3	19,88
2022	3191,2	138,7	4,35	641,4	20,10	856,9	26,85	911,7	28,57	642,4	20,13

Source: National Statistical Institute, 2023, p. 37; Own calculations

The data presented in Table 1 show a stable trend in the distribution of the employed population by age category, as for all five years of the period under consideration, the highest relative share of employment (27% on average) belongs to the employed within the age range 35-44, followed by those aged 45-54 and 55-64. With the lowest share- an average of 4.3% of the total number

of people employed is the age group 15-24 years, which proves to be at risk in the labour market in the long run. The data also show a trend of a gradual increase in the share of employed people between the ages of 45 and 54. The relative share of those employed over 65 years of age remains relatively constant (approximately 0.5% of the total number of the employed population).

The structure of the employed population in the Republic of Bulgaria by age group for 2022 is presented in Figure 3.

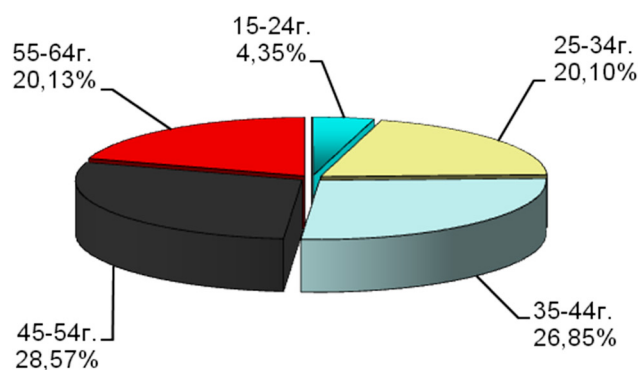


Figure 3. Structure of the employed population in the Republic of Bulgaria by age groups, the year 2022

Source: National Statistical Institute, 2023, p. 37; Own calculations

The age structure of people in employment in the economy of the Republic of Bulgaria follows the trends of the labour market in the Eurozone, which are a result of unfavorable demographic processes, mainly related to a decrease in the population of working age.

Traditionally, the labour force in the Republic of Bulgaria is concentrated in urban areas as well as in the agglomerations² around the larger cities, whereas the employed in rural areas are approximately 30% of those employed in cities. Details on the distribution of the population employed in the country by types of settlements for the period under consideration are presented in Table 2.

Table 2. Number of employed by place of residence, thousands of people

By region:	2018		2019		2020		2021		2022	
By city	2595,2		2623,5		2532,1		2503,4		2534,3	
By village, including share of those employed in cities %	730,8	28,2	752,5	28,7	758,2	29,9	744,1	29,7	756,7	29,9

Source: National Statistical Institute, 2023, p. 37; Own calculations

Given that the active population in rural areas is mainly employed in the country's agricultural sector, characterized by a long-term stagnation in earnings compared to other economic sectors (services, industry, etc.), the data pertaining to the employment rate and economic activity of the labour force in the rural areas of Bulgaria reflect these objective interdependencies (Figure 4). According to the national statistics for the period 2018-2022, the average annual salary of those employed in Bulgaria's agricultural sector does not exceed 75% of the average annual salary for the country as a whole.

² Agglomerations in urban planning are settlements that arose as a result of uniting large cities and smaller settlements located around them into a common urbanized territory

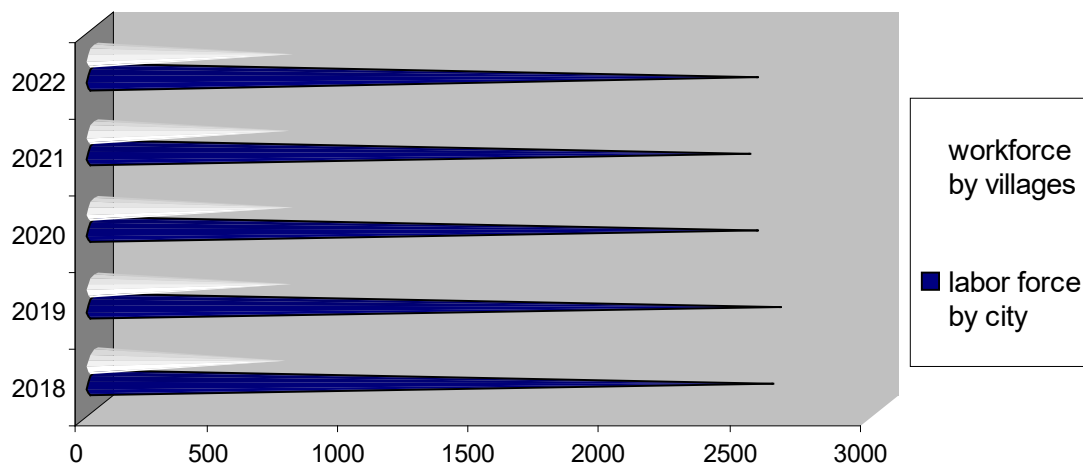


Figure 4. Distribution of the employed workforce in the Republic of Bulgaria by populated area types

Source: National Statistical Institute, 2023

5. FUTURE RESEARCH DIRECTIONS

Future research in the field of the labour market and the structure of the labour force in employment would be directed towards analyzing the regional distribution of labour resources in the Republic of Bulgaria, taking into consideration the labour force composition, qualification, education, professional orientation, etc., having a key importance for both the development of individual economic sectors at the regional level and the organization of the respective industry enterprises locally.

The personnel planning and selection methods at the enterprise level would be of interest too. However, of particular interest would be the application of contemporary methods and approaches in the selection of personnel in view of the new challenges, including the application of the positive aspects of artificial intelligence in certain activities and professions.

6. CONCLUSION

Summarizing the results of the analysis related to the employment rate, economic activity and structure of the labour force in the national economy of the Republic of Bulgaria for the period 2018-2022 (2023), it can be concluded that:

- The lowest labour force employment rate in the country's economy is reported in 2021, which is a direct reflection of the Covid-19 pandemic that affected the labour and employment conditions for the majority of economic sectors;
- A recovery of the labour force's economic activity is reported in 2022, after which a steep decline in the number of people employed in the Bulgarian economy is registered for the first quarter of 2023, whose number falls below 3 million people, being the lowest for the period 2018 - 2022/ 23;
- The highest coefficient of economic activity of the labour force in the Republic of Bulgaria is reported in 2022, as for the same year the participation of the country's active population in the national economy reaches 73.6%;
- The maximum relative share of the employed is reported in the age range 35-44, followed by those employed within the age range 45-54, as for the latter group the employment rate sees a smooth increase;

- e. With the lowest share - an average of 4.3% of the total number of people employed in the national economy of Bulgaria is the age group 15 - 24 years, indicative of the fact that the high youth unemployment rate has become a long-term phenomenon in the country.
- f. Traditionally, the labour force in the Republic of Bulgaria is concentrated in urban areas, while the share of people employed in rural ones is approximately 29% of all employed in cities.

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