LABOUR INCOME AND WORK MOTIVATION

The impact of labour remuneration, inequality and poverty on the work motivation of the Bulgarian population is examined. The focus is placed on determining such levels of labour income that would stimulate the employed and their professional realization. The results show the following: that wages are a weak incentive among employees; that dissatisfaction with the level of remuneration is high; that the age and the education structure of the population have a significant impact on work motivation; and that inequality and poverty have little impact on economic activity.

JEL: E24; J20; J31; J32; I32; M12

<u>Keywords</u>: motivation theories; labour motivation; labour income; labour satisfaction; inequality; poverty

The research on the capacity of remuneration to stimulate labour is the subject of many theoretical and empirical studies. From a theoretical point of view, a range of motivation concepts have been developed, in which, in one form or another, the wage component has been included (Surcheva, 2004; Deci, 1975; Herzberg, 1964; Paunov, 2009; Maslow, 2001; Ilieva, 2009). From a practical standpoint, the studies have concentrated on developing methodologies for personnel motivation in different types of organizations (Deci et al., 2001; Ilieva, 2004; Topouzova, 2016; Ilieva, 1998; Kreitner & Buelens, 1999; Herzberg et al., 1956). In most studies, the wage falls within the group of material stimuli, but it is characterised by short-term impact and high volatility.

Labour remuneration has a social value and importance because it is the main source of income for the working age population and parts of it are directed towards supporting family members. The inability to enter employment and earning a low income are both proven prerequisites for personal impoverishment and marginalization (Tsanov, 2014; Shopov, Tzanov, 2015).

Throughout the history of industrial societies remuneration has been largely associated with a sense of dignity from one's public realization and the manifestation of personal talent and professional capacity. Engaging in work activity implies satisfaction with the work and the conditions under which it is realized, as well as satisfaction with the formally established relationships with employers and remuneration received. Employers can also provide additional bonus payments and social benefits (in cash or in kind), but wages remain of fundamental importance for employment.

In this context, the objective of the study is to characterize the link between the amount of labour income and the motivation for work. In the context of this objective, the analysis focuses on two issues. The first one concerns an assessment of the level of labour incomes that motivates the labour activity of employees under a labour contract or other legal forms of employment relationships. The estimates are

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based on the individuals' subjective perceptions of the fairness of their wages (gross and net) and are differentiated, based on the age and education level of the individuals. The second one deals with determining the level of labour income that would encourage inactive persons to enter the labour market. Regular statistical information and data from the European Social Survey – 2018 (pilot phase)¹, conducted by the National Statistical Institute (NSI), were used in order to achieve these objectives.

The development of the labour market and the economically inactive working age population

In the last ten years, the Bulgarian labour market has been characterized by a period of deterioration and improvement (Table 1). During the period 2010-2013, almost all key indicators worsened. The total number of the employed decreased by about 148 thousand persons, representing a slump in employment of about 4.9%. The unemployment rate rose, increasing the number of unemployed persons by about 291 thousand, or by 23.6%. Because of these two processes, the number of working age people participating in the labour market declined by about 65 thousand, or by almost 2%. At the same time, the number of working age people outside the labour market decreased by nearly 155 thousand mainly due to demographic factors (retirement and emigration).

Table 1
Key labour market indicators for the working age population (15-64 years)

	2010	2011	2012	2013	2014	2015	2016	2017	2018
Employed (in thousands)	3037.0	2927.5	2894.9	2889.4	2927.4	2973.5	2954.3	3073.4	3068.9
Employment coefficient (in %)	59.8	58.4	58.8	59.5	61.0	62.9	63.4	66.9	67.7
Unemployed (in thousands)	350.4	374.8	409.0	433.2	381.3	302.5	245.3	204.1	170.8
Unemployment coefficient (in %)	10.3	11.4	12.4	13.0	11.5	9.2	7.7	6.2	5.3
Labour force (in thousands)	3387.4	3302.3	3303.9	3322.7	3308.7	3276.0	3199.6	3277.5	3239.6
Coefficient of economic activity (in %)	66.7	65.9	67.1	68.4	69.0	69.3	68.7	71.3	71.5
Persons outside the labour market (in thousands)	1691.7	1707.6	1619.7	1536.5	1486.9	1450.6	1459.2	1317.7	1291.4

Source. NSI. Labour Force Survey.

Since 2013, there has been a process of improvement of the labour market indicators. Employment, although slowly and hesitantly, has registered a rise, while unemployment has significantly declined. In 2018, the unemployment rate dropped down more than twice, reaching 5.3%. The workforce number has been fluctuating, but it has remained below the 2013 levels for the last three years. The trend of declining numbers of working age people outside the labour market continues.

¹ Data were provided by the NSI which carried out the survey (http://ess-bulgaria.org/). The final database of the survey will be published on the internet site "European Social Survey" (http://www.europeansocialsurvey.org/).

Compared to 2013, their number has decreased by about 245 thousand people, and for the entire period the reduction has been 400 thousand people in total. According to the conducted detailed studies, the potential of inactive persons aged 15-64 years who would enter into employment is insignificant or almost exhausted in most regions in Bulgaria (Loukanova, 2019).

Education level and age are prerequisites of proven key importance for inclusion into the labour market. Persons with higher education are best placed to join and stay in employment, insofar as it entails acquisition of higher levels of general and professional knowledge, as well as higher potential for improvement². Their share in the number of persons outside the labour market is naturally too small (7-10%). However, in dynamic terms, their number increased in the period until 2014, after which it declined, but ultimately it did not fall below 133 thousand (Table 2). Persons with secondary education who are outside the labour market make up a relatively high share, which varied within the range of 45-48% over the period considered. Since 2011, the size of this group has gradually decreased (Table 2). The share of people with a low education level (primary and lower) is large. Despite the significant decrease in their number over the last 10 years (by around 211 thousand), their share in the total number of persons outside the labour market remains high (44.4% in 2018).

Table 2
Working age population outside the labour market, by age and education (in thousands)

	2010	2011	2012	2013	2014	2015	2016	2017	2018
			Education	on level					
University	133.4	145.0	140.3	148.5	156.5	142.3	146.1	133.1	133.1
Secondary	774.4	811.9	783.0	741.1	696.5	676.0	681.3	603.8	585.5
Primary and lower	784.0	750.7	696.4	646.9	633.9	632.3	631.8	580.7	572.8
			Ag	е					
Youth – aged 15-34 years	831.8	828.9	778.6	755.7	748.6	732.1	738.0	674.5	674.8
People aged 35-55 years	321.7	335.8	328.5	305.6	295.3	298.1	315.4	269.7	266.2
People aged 56-64 years	538.2	542.9	512.6	475.1	443.0	420.5	405.9	373.4	350.5

Source. NSI. Labour Force Survey.

Young people aged 15-34 take up the largest portion in the age structure of persons outside the workforce (15-64 years). Their relative share has increased from 49.2% in 2010 to 52.3% in 2018, despite a decrease of about 157 thousand persons. In most of the cases, the young people that do not participate in the labour market have objective reasons for this, such as studying or raising children. However, it should be noted that they have high emigration attitudes and high expectations for

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² The competences of the workforce, particularly digital competences, are of great importance for employers. Serious problems exist regarding the acquisition of the necessary competences by the modern labour force and regarding the unfavourable structures of the Bulgarian labour force, (which should be the subject of separate studies).

their initial wage that also hamper their first steps into employment. There is also a problem of the mismatch between the levels of supplied and demanded professional qualifications and competences, when they start their first job. Despite the successes achieved in reducing the youth unemployment rate after the implementation of the Youth Guarantee 2014-2020 National Plan (Loukanova, 2018). Bulgarian youths (15-24 years) still have one of the highest inactivity rates compared to their peers in the other European countries.

The contingent of middle-aged people (35-55) makes up about one fifth of the persons who do not work and do not seek employment. Their number has been marked by a fluctuating trend of development over the period considered, encompassing 260-350 thousand people, and their number is strongly dependent on labour demand.

About one-third of unemployed and job non-seekers are people of preretirement age (56-64). They have trouble finding a job mainly because of old age and related health problems; low professional mobility due to the "wear and tear" of the qualification possessed and the few opportunities for its updating in the country; high degree of sedentariness and poor geographical mobility. The number and the share of this age group has been decreasing over the period considered. Compared to 2010, in 2018 the number of inactive persons aged 56-64 years decreased by about 188 thousand, and their share in the total number of persons outside the workforce decreased by 4.7%.

The reasons for being outside the labour market are numerous, but a significant part of them is directly related to the personal motivation and the individual's desire to participate /or not/ in the labour market. The National Statistical Institute surveys two main groups of reasons (Table 3).

Table 3

Working age population outside the workforce due to inactivity (in thousands)

	2010	2011	2012	2013	2014	2015	2016	2017	2018
Persons willing to work								ı	
Total	316.6	324.0	309.7	299.7	274.1	251.7	235.5	184.5	160.9
Discouraged	220.7	233.5	225.6	206.5	188.7	170.0	163.4	112.2	81.4
Persons in education	6.3	6.5	4.5	5.2	6.1	4.6	3.7	4.2	6.4
In poor health	3.9	4.0	4.3	5.8	4.0	3.9	3.2	3.6	3.7
Personal or family reasons	18.4	19.1	18.9	21.5	20.1	17.3	16.4	18.3	20.9
			Persons r	ot willing t	o work				
Total	1375.2	1383.6	1310.0	1236.8	1212.7	1199.0	1223.7	1133.2	1130.6
Old age	336.0	344.6	311.4	270.8	236.6	220.7	215.0	191.1	170.1
Persons in education	502.8	496.3	472.8	451.4	447.1	444.9	442.9	425.0	431.1
Persons in poor health	213.1	213.0	214.9	208.2	208.4	201.3	195.4	189.0	194.2
Personal or family reasons	247.2	246.3	234.3	244.4	258.2	260.1	289.3	275.1	286.3

Source. NSI. Labour Force Survey.

The first group includes reasons for inactivity among the inactive people who want to work, and the second one includes reasons for inactivity among the people with a firm reluctance to work. There is a tendency towards a reduction in the number of persons in both groups; however, unfortunately, a stronger drop down is observed in the group of people who want to work. As a result, the ratio between the two groups is in favour of the latter. The share of inactive persons who do not want to work increased from 81.3% in 2010 to 87.5% in 2018. In practice, this means that the potential for people who are inclined to join the workforce in the future is going down.

The analysis of the reasons for inactivity shows the following particularities:

Firstly, education is the strongest reason for economic inactivity. Almost two thirds of inactive persons state that they are currently attending an educational institution or a qualification course. Their relative share in the total inactive persons has increased from 30.1% in 2010 to 33.9% in 2018. Only a small portion of people in this group have expressed a willingness to work. Their number varies within 4,000-7,000 persons.

Secondly, personal or family reasons are mentioned by about one fifth of inactive people. The number of persons pointing out such reasons increased during the period considered, among both those who wish to work and those who do not want to work. However, the number of the latter is much higher (about 12-15 times).

Thirdly, age (in terms of low occupational and geographical mobility and outdated occupational skills and competences) is mentioned by close to one fifth of the inactive population as a reason for not participating in the labour market. The number and, respectively, the share of the persons pointing out this reason significantly decreased. During the period under review, their number has fallen almost twice, and their relative share has fallen by 6.7percentage points (from 19.9% in 2010 to 13.2% in 2018). This significant decrease is most probably due to their transition to the category of pensioners.

Fourthly, the number and the share of people who give up on participation in the labour market due to long-term unsuccessful efforts (discouraged persons) has significantly declined. In the period 2010-2018, their number went down by almost three times and their relative share dropped by 5.7 percentage points.

A relatively small group of people outside the workforce expressed a willingness to start working. Their share in the number of people outside the workforce was about 16.6% in 2010 and dropped to 10.1% in 2018. This was a result of the significant decline in the number of people ready to start working (by 151,200 people over the period 2010-2018). During the overall period, their willingness to join the workforce decreased more than twice (Table 4), which in practice means a significant contraction of the potential labour reserves. The tendency of diminishing labour reserves is valid for all education levels and age groups (Table 4).

Table 4

The attitude of inactive persons who are ready to start a job towards the workforce, by education level and age (in %)

	2010	2011	2012	2013	2014	2015	2016	2017	2018
Total	8.2	8.5	8.1	7.5	6.9	6.4	6.3	4.6	3.9
			Educatio	n level					
University	1.9	1.9	2.1	2.3	1.9	1.5	1.2	0.8	0.7
Secondary	6.5	7.1	6.4	5.9	5.6	5.1	5.0	3.3	2.7
Primary and lower	26.1	27.0	27.5	26.2	23.1	24.1	25.1	20.3	17.4
			Ag	е					
Youth (15-24 years)	19.9	20.5	18.6	18.9	18.4	19.2	18.3	11.2	12.1
Middle aged (25-54 years)	6.7	7.1	7.0	6.3	5.8	5.4	5.5	4.1	3.3
Elderly (55-74 years)	9.4	9.4	8.5	8.5	7.6	6.8	6.3	5.1	4.4

Source. NSI. Labour Force Survey.

The differences in the persons' readiness to participate in the labour market, based on their education level are quite significant. The inactive people with higher education are the least ready. Over the entire period, their numbers and positive attitudes towards joining the workforce have decreased almost twice. In contrast, the readiness of inactive people with secondary and lower education is much higher. To some extent, this is due to the larger number of persons in these two groups. In a dynamic aspect, the downward trend in the number of people willing to work is observed in both the secondary and lower education level groups. This trend is more pronounced for persons with secondary education. Their positive attitude towards joining the workforce has fallen by nearly three times. The main labour reserve consists of persons with primary and lower education. This is a consequence of their high share in the contingent of inactive persons wishing to work (in 2018 they made up 55.7%, followed by the people with secondary education, who made up 38.8%, and the university graduates, who made up the remaining 5.5%).

A similar picture of a declining number of persons who expressed readiness to work is observed in all age groups. It is most pronounced among young people aged 15-24. Their number has decreased by more than three times, while the number of the other age groups has decreased by about two times. However, the youths have the greatest potential for expanding the workforce (12.1% of them showed a positive attitude towards joining the workforce in 2018). This is due to the relatively small number of young people participating in the labour market. The other age groups have a relatively smaller potential for increasing the workforce.

Based on the estimates presented for labour market development and participation in it, the following conclusions can be summarized:

• The recovery of the labour market after the economic crisis and its subsequent stagnation is developing at a moderate pace. The employment, although slowly and hesitantly, has been on a rise and the unemployment has significantly declined.

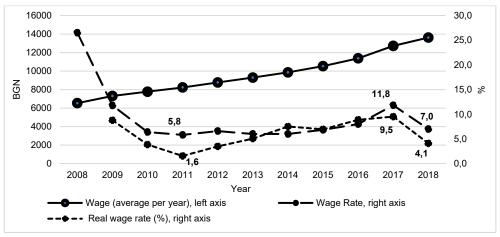
- A significant decline can be observed in the numbers of the potential workforce (the economically inactive population). This is valid for all education levels and age groups, although to varying degrees. Persons with higher education and middle-aged people are the least affected.
- A very small part of the inactive population expresses a willingness to participate in the labour market. Their number has been decreasing in varying degrees for the different age and education level groups.

Wages - level, dynamics and policies

The purpose of presenting systematic information on remunerations in the period 2008-2018 is to show the general situation in the country and to indicate the problems it provokes (Figure 1). In general, the economic situation in 2018 was characterized by an increase in inflation, slowdown of the gross domestic product, and declining workforce due to the demographic crisis.

Against this background, in 2018, wages continued to rise in nominal and real terms, but at a slower pace. According to NSI preliminary data, the nominal average annual wage for 2018 reached BGN 13,621 and increased by 7% compared to 2017, while in 2017 it was BGN 12,725 (an increase of 11.8% compared to 2016). A decline in growth has been observed after the stagnation of wage dynamics between 2010 and 2014, although not as strongly as during the crisis year 2009, when the rate dropped by about 15 percentage points. The decrease in 2018 can be overcome in the presence of favourable developments in the economic conjuncture and exports. However, it is a signal for the worsening pre-conditions that determine remunerations in Bulgaria.

Figure 1
Level and dynamics of the average annual wage in nominal and real terms



Source: NSI, author's estimates.

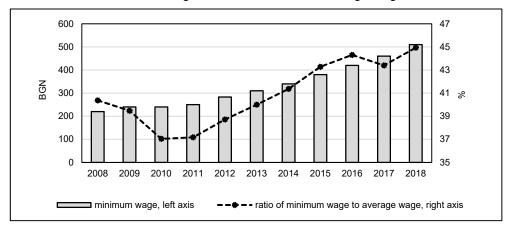
The dynamics in the real wage tend to accelerate in the period 2011-2017. The growth rate has increased from 3.9% in 2011 to 9.5% in 2017. This acceleration in recent years has been largely due to the negative inflation rate. In 2018, real wages were growing at a pace that was twice lower (4.1%) compared to the previous year. The differences in the dynamics of the nominal and real wages were not significant in the years of negative or low inflation, but they began to become more noticeable as the inflation rate rose in 2017 and 2018. It is expected that inflation will continue to increase in the coming years. This will necessitate changes in the policies for protecting the income of the population, particularly the low wages and their taxation and social security contributions.

An important position in the remuneration system is occupied by the minimum wage (MW). It is determined administratively. In the period 2008-2018, the minimum wage increased significantly (Figure 2). In the last years, there has been a positive development in the minimum wage as compared to the average wage. The ratio of minimum wage to average wage has increased significantly since 2010 – from 37% in 2010 to 44.9% in 2018. The average annual ratio was 40.9% during this period, which is close to the values for the EC-28.

The ratio of the minimum wage to the average wage has ambiguous economic and social consequence. From the point of view of the minimum wage earners, updating its rate is an important step in improving their standard of living and an incentive for better work activity. From the employers' point of view, this is an unacceptable decision in terms of retaining labour productivity as it leads to a decrease in the price competitiveness of the output produced because of the rising labour costs. It is logical to assume that the ratio in 2018 may be one of the reasons for the registered decline in employment.

Figure 2

Minimum wage rate and ratio to the average wage



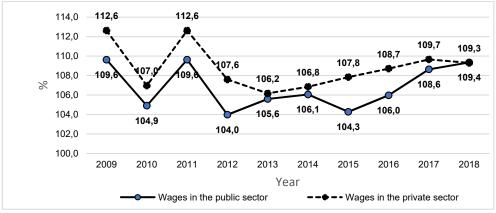
Source: NSI, MLSP, author's calculations.

The total labour costs have registered a steady upward trend. Compared to 2012, they increased by 52.3 percentage points³. These costs are an essential preliminary argument for employers' decisions on how many and what types of new employees they shall hire and at what wage rates. They may be borne by the employers in the case of restructuring the production costs. The issue lies in reducing the high energy and resource production intensity, which is typical for Bulgaria, and, accordingly, in increasing wages without loss of competitiveness. This can be an integral result of investments made in new techniques, technologies and increased labour intensity. Insofar as this is not yet a widespread practice, competitiveness is achieved through a moderate increase in labour costs or their retention or reduction.

The implemented policy on labour income concerns the development of labour income in the public sector (through budget financed expenditure) and the setting of the minimum wage. After the reforms in the pay of the state administration, which were introduced in 2012, and until 2016 the salaries of employees increased in a balanced manner. The number of public administration employees is being systematically reduced in order to optimize and improve the efficiency of services. As in previous years, policy decisions are expected to achieve key objectives, such as limiting budget spending for wages and managing budget deficits.

In the period 2009-2017, the average wage rate in the private sector outpaced that in the public sector (Figure 3). In 2018, wage growth was equal in the public and the private sector. A similar situation was observed in 2013-2014, which urged for an optimization of labour costs in both sectors, but above all of the wages in the public sector.

Figure 3
The dynamics of wages in the public and the private sector (annual rate)



Source: NSI, author's estimates.

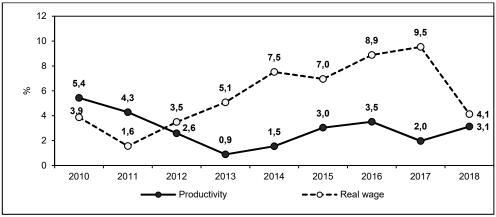
³ Using 2012 as a basis, the index of the total labour costs for employers per employee is: 119% in 2015; 127.3% in 2016; 142% in 2017; and 152.3% in 2018, respectively (calendar adjusted data). Source. NSI.

In 2018, the policy of the administrative increase of the minimum wage, which began in mid-2011, continued. The government proposed a mechanism for its formation, which was not accepted by the social partners. The important prerequisite has not yet been achieved for the elaboration of an acceptable mechanism for fixing the MW in relation to ILO Convention 131, which was ratified by the Parliament and is scheduled to take effect on March 20, 2019⁴.

The wage bargaining systems at the high and low wage levels still work on the principle of opposing social partners instead of searching for the best ways to implement a national concept of employment while raising the labour price. Traditionally, trade unions have been advocating for an increase in the minimum wage (and of remunerations in general) in Bulgaria, as well as for improvements in the working conditions. This is a fully justified position, as no change in productivity can be required without appropriate technical, technological, organizational, information and other changes.

In response to the trade unions' positions, employers' arguments were that a higher rate of wage increase than that of the productivity should not be allowed. This happened in 2018, when the dynamics of real wages and productivity significantly converged (Figure 4). However, it was a consequence of the impact of inflation on the real wage, which is an exact representation of the nature of the growth in productivity – with a decline in the number of employees and an increase (however slight) in the GDP.

Figure 4 Dynamics in labour productivity and real wage (growth rate, in %)



Source: NSI, author's estimates.

Setting common tasks in the long run requires clarifying the direction of the changes in the income policies. Without exaggeration, it can be argued that at the

 $^{^{4} \} www.ilo.org/budapest/whats-new/WCMS_631168/lang--en/index.htm$

present stage these policies can contribute to stimulating the stay of the population in Bulgaria and to limiting the emigration of some groups. However, the problem does not depend solely on the labour remuneration and the attitude towards it, but also on employment conditions and job stability, career opportunities, living standard and other prerequisites that determine the subjective attitude towards work and life in Bulgaria. It makes sense to start the changes with an emphasis on the fairness of the remunerations offered. The analysis of the subjective information about this fairness is one of the steps towards the justification of possible changes to the income policies applied in Bulgaria.

Assessment of the motivational levels of remuneration

The remunerations of employees, including employed, self-employed and family workers, are the subject of the analysis, and the remuneration levels, the differentiation, the worker's satisfaction with their amount and the importance of the remuneration as a motivator for self-realization in work are the subject of study. In order to analyse these relationships, information taken from a survey for Bulgaria, which was published in the ninth edition of the European Social Survey (2018-2019), has been used⁵.

The group of respondents receiving remuneration is 42.5% of the total number of respondents. It is dominated by males, persons with secondary education, employees, and workers in the private sector. The comparison with the relevant structures of respondents in the NSI Labour Force Survey (LFS) shows a similarity and justifies considering the results obtained from the survey analysed here as significant. The information below summarizes the answers about the amount of the total labour remuneration (not just from employment relationships) and the satisfaction that comes with it.

Level, differentiation and satisfaction with remuneration

Remunerations (gross and net) are presented in two scales in the European Social Survey. The first fixes the specific amount of remuneration, while the second

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⁵ The research toolkit of each individual edition/wave consists of basic modular blocks and specific ESS focuses included in the rotary modules in the individual project editions. The basic module is repeated every two years without any changes, and it covers the following problematic topics: moral and social values; health and well-being; trust in institutions; education and profession; social capital and social trust; household structure; civic participation and democracy; social exclusion; political values and commitment; socio-demographic characteristics; immigration; and crime. In the last (ninth) round of the European Social Survey, Block G – Evaluation of income and access to education and work – has been included. The answers to the questions on the self-evaluation of earned income are reviewed below, unless another source of information is indicated. For general information on the European Social Survey (ESS - ERIC), see: https://www.europeansocialsurvey.org/about/.

determines the income over a certain interval. The majority of the respondents⁶ (69.9%) pointed out their remuneration in the interval scale. In order to achieve greater precision, the incomes have been analysed separately for each scale (excluding gross remuneration below BGN 510/EUR 260)⁷.

The distribution of persons who specifically fixed their gross remuneration has several peaks. The highest peak is BGN 510, which corresponds to a 19.7% share of the persons with a gross monthly income below BGN 510. The share of persons with income between BGN 510 and 800 is almost half of all respondents (40.8%), and those with income between BGN 800 and BGN 1,000 make up 20.4%. The share of persons with high incomes (over BGN 1,200) is only 9.7%.

The respondents who used the given interval scales to indicate their gross remuneration have the following main groups of answers: 5.5% state an income of between BGN 481 and BGN 640; 5.6% place it between BGN 641 and BGN 810; and 2.1% report that it is between BGN 1,601 and BGN 2,400. The main concentration of answers (25.7%) is in the interval BGN 811 - BGN 1,130.

In 2018, 22.5% of respondents received a gross income below the minimum wage. The share was calculated after combining the answers of those who pointed out their remuneration and those who used the income intervals scale.

It is difficult to compare the distribution of the respondents' answers about their gross remuneration; however, it can be assumed with certain conditionality that some 80% of respondents receive gross income of up to BGN 1,000, including the 60% who receive up to BGN 800. This means that most employed persons (at least 80%) receive a gross labour income that falls below the 2018 average gross salary of BGN 1,135, reported by NSI.

There is a strong similarity between the distribution of net remunerations and the distribution of gross remunerations due to the applied fixed rate of the income tax for natural persons.

The comparison of the distribution among the answers of respondents who fixed the specific amount of their net remuneration with those who used the intervals scale leads to the assumption that around 60% of all respondents receive a net income of up to BGN 1,000 and that 40% receive a net income of up to BGN 600. The results of the analysis of the net labour income confirm the assumption of a high degree of differentiation in labour remunerations, with prevailing shares of those with low level remunerations.

The existing differentiation in favour of low labour remuneration is one of the prerequisites for low personal satisfaction with labour pay, as well as for a low subjective evaluation of its fairness. Almost half of the respondents (41.9%) expressed significant or complete dissatisfaction with their gross remuneration. The total share of dissatisfied respondents is 74.4% and only 20% were satisfied with their labour income.

⁷ Here and further below BGN 1 = EUR 1.96 according the rule of the Currency Board in Bulgaria.

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Hereinafter, the use of the term 'respondents' shall mean persons receiving labour income, unless otherwise indicated.

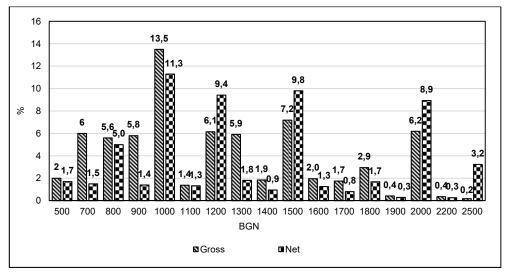
The low level of satisfaction with the received net remuneration is an expected result. Only 17.5% considered their net remuneration to be fair and 77.3% were not satisfied. A high degree of dissatisfaction (complete or strong) was expressed by 46.8% of the respondents, while 30.2% reported weak or moderate dissatisfaction.

It can be summarized that the respondents' satisfaction with their gross and net labour remuneration is low. These remunerations cannot be a strong incentive for self-realization in work for more than two thirds of the respondents.

What is the fair gross and net remuneration for the respondents who expressed dissatisfaction with their labour income? This question was asked only to those who expressed such dissatisfaction. In their answers, the respondents fixed the exact amount of the remuneration they perceived as fair (Figure 5).

Figure 5

Share of persons who fixed their perceived fair gross and net monthly remuneration



Source. Author's estimates, based on the European Social Survey, 2018.

The interval BGN 1,000 – BGN 1,200 was considered as a fair gross remuneration by 19.6% and as fair net income by 20.7% of the respondents.

The group of respondents with gross income below BGN 1,000 demonstrated a lower level of satisfaction with their net remuneration compared to their gross remuneration. The opposite is true for individuals with a gross income over BGN 1,000. Net incomes of BGN 1,000, BGN 1,200, BGN 1,500, BGN 2,000 and BGN 2,500 were ranked highest. These results can be linked to the current system for the income taxation of natural persons, which obviously reduces the feeling of fairness

for respondents with a gross remuneration of up to BGN 1,000 who have trouble bearing its burden. This group includes employees who would like their net labour income to be at the level of their fair gross earnings. On the contrary, persons with gross remunerations over BGN 1,000 do not feel "affected" by taxes and other deductions on their wages, unlike people in the first group. The individuals in the second group considered their net income to be fair. It can be assumed that a remuneration of BGN 1,000 is the desired maximum for low-paid persons and the minimum for people with opportunities to receive higher gross salaries.

In addition to the above assessment, 79.9% of the respondents estimated that the total remuneration of "people like them" is unfairly low and only 13.8% considered it fair. The feeling of general injustice suggests both a weak motivation to take some action to change the status quo and an inability to find a high-paying job. This situation may be related to the prevailing share of small and micro enterprises in the country, which in the general case do not have stable business positions and a capacity for raising the wages, but it may also be due to a number of other reasons which may be objective or subjective in nature. It can be expected that these small and micro firms will keep low labour costs at the local labour markets if they hold monopoly positions there.

In addition to the perceptions of the respondents on fair and unfair pay, their opinions on whether it is possible to find a suitable job in Bulgaria are also presented. On a personal level, 13.1% thought they do not have any chance, while those on the opposite side of the spectrum were only 5.6%. According to the proposed scale, 38% mentioned that they personally do not have good opportunities, 51.7% stated they have average opportunities and 27.6% indicated that they have good opportunities. One-third of the respondents did not find an answer to this question, did not want to answer, or felt that they did not have any opportunities.

Participation in the labour market depends largely on the quality of the jobs offered. It turns out that the subjective assessment about the existence of good job opportunities in the Bulgarian labour market by individuals once again contains a lot of negativism. About 47.7% believed that not everyone has good opportunities to find a suitable job. According to 17.0% there are good opportunities for finding the desired job, while the moderate optimists among the respondents were 14.5%. The main reason for the opinion that there is a lack of "good job opportunities" is the low income, which is considered unfair by the employed persons in Bulgaria. However, this is not the only argument in that employment is determined by a wide range of incentives, one of which is labour remuneration.

Differentiation of the desired fair net remuneration, based on the education level of the employees

It is interesting to see to what extent net remunerations were assessed as *fair depending on the respondents' education level* (Table 5). As a rule, education essentially determines the position in work and the possibilities for higher productivity and different pay levels, all other things being equal.

Table 5 Distribution of desired net remunerations by education level (in %)

Remuneration/ Education level	Up to BGN 500	511- 800	801- 1,000	1,001- 1,200	1,201- 1,500	1,501- 2,000	2,001- 2,500	Over BGN 2,501	No answer	l don't know	Total
Primary and lower	14.9	27.7	21.6	2.9	9.0	0.0	0.0	0.0	12.1	11.8	100.0
Secondary	0.8	11.2	24.0	7.5	13.6	11.7	0.0	2.3	17.6	11.3	100.0
Incl. secondary technical	1.0	12.2	24.3	6.0	15.0	14.0	0.0	0.7	15.7	11.3	100.0
University - Bachelor	0.0	7.3	19.3	0.0	25.2	6.3	0.0	0.0	14.5	27.3	100.0
University – Master	0.0	4.9	7.5	7.1	18.2	26.1	2.3	7.5	16.1	10.3	100.0
University – PhD/ScD	0.0	0.0	0.0	0.0	0.0	71.2	0.0	0.0	0.0	28.8	100.0

Source. Author's estimates, based on the European Social Survey, 2018.

27.7% of persons with primary and lower education pointed out remuneration ranging from BGN 511 to BGN 800 as fair, and for almost half of the people in this group (49.3%) remunerations between BGN 511 and BGN 1,000 were considered fair. The minimum wage was considered fair only by 14.9% of the respondents and obviously has low popularity.

The highest share of persons with secondary education (24%) defined net remuneration ranging from BGN 800 to BGN 1,000 as fair, and 13.6%, respectively, classified remunerations between BGN 1,200 and BGN 1,500 as fair. The answers given by persons with secondary special education were grouped in a similar way. Bachelors would be content with a payment of between BGN 1,200 and BGN 1,500, and masters would be content with a sum between BGN 1,501 and BGN 2,000. For persons with PhD and ScD degrees, the desired net remuneration was between BGN 1,501 and BGN 2,000.

The respondents' estimates for fair pay increased with the increase in their education level, which is an expected result. The assumption that a net remuneration of BGN 1,000 is the most popular fair remuneration has been confirmed, because it is the desired remuneration of those with secondary education who represent the highest share in the workforce.

An interesting fact is the relatively small difference between the answers of secondary school graduates and university graduates (bachelor, master and doctoral). They are even similar for a proportion of the employees in both groups, which again raises questions about which professions actually require university education to obtain the necessary professional qualifications (or competencies) to practice them. In addition, the tendency of university graduates to consider as fair the remunerations received by persons with secondary education draws attention to the problem of the vertical mismatches in the labour market. Obviously, these respondents are university graduates hired for positions that do not require their high level of education. Despite the need to stimulate the academic and other autonomy of higher education institutions, the efficiency of their work against the real needs of the labour market has not yet given a well-proven result.

It is difficult to comment on the claim for a fair remuneration of BGN 1,200 by a person with secondary education against the 'modest' expectations of between

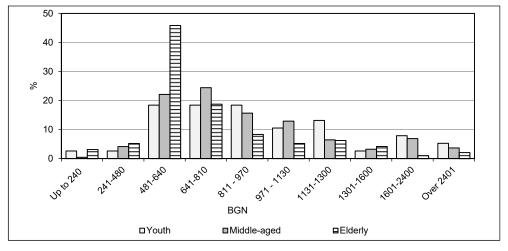
BGN 1,501 and BGN 2,000 by masters and doctors. The reasons for underestimating the importance of the work of highly educated persons are different in nature. The main ones include the inappropriate employment conditions, which do not provide opportunities for the full expression of their knowledge and skills; the low demand for such specialists and the fundamental importance of secondary education specialists; the inadequate educational preparation of university graduates; the opportunities for realization abroad at better pay; the low interest in applied scientific research activities and in the appointment of professionals who are qualified to carry them out.

The distribution of remuneration and views on its fairness, based on the age structure of the respondents

The distribution of employees by age is the subject of the analysis. The employed persons are divided into three age groups: young people, middle-aged people and older people. The youth group includes persons between the ages of 18 and 30. The middle-aged group includes people between the ages of 31 and 55. And lastly, the older employees form the group above 56 years of age. The differentiation in the gross remunerations of employed persons, based on their age, and the assessment of the respondents' views on their fairness are the object of the analysis.

The distribution of the age groups of the employees in terms of their level of monthly gross remuneration is concentrated on the left side (low income) of the income distribution scale (Figure 6).

Figure 6
Age grouping, based on the level of labour income



Source. Author's estimates, based on the European Social Survey, 2018.

Most young people (55.3%) earn an income within the range of BGN 480 – BGN 970. The share of young people with remunerations within the range of BGN 971 – BGN 1,300 is almost one fifth. The situation is different in the two interval ends (lowest and highest). A small proportion of young people (5.2%) have incomes below BGN 480, while the share of young people with incomes above BGN 1,600 is more than two times higher (13.2%).

The distribution of the labour income of the middle-aged people is close to that of young people. Nearly two-thirds of employees (62.2%) receive monthly remunerations within the range of BGN 481 – BGN 970. The share of people with incomes below BGN 480 is relatively low (4.6%), and those receiving over BGN 1,600 represent 10.6%. Compared to young people, the distribution of middle-aged employees in the two end intervals is less represented.

The situation among the elderly employees is different. About 46% of them receive wages within the range of BGN 481 – BGN 640. Most employees in preretirement age (72.9%) placed themselves within the interval BGN 481 – BGN 970. Differences can be observed in both end intervals. About 8.3% earn incomes below BGN 480, while those with incomes above BGN 1,600 are only 3.1%.

Based on the available information, the differences between the employees' labour income in the three age groups can be traced according to the distribution of their incomes – low, middle and high. For this purpose, the scope of the low-income group has been defined as labour income below BGN 640. The average income covers the BGN 641 – BGN 1,300 range, and the high-income group includes those receiving over BGN 1,301. Of course, this distribution is conditional and is largely dictated by the available information.

The distribution of young people's remunerations at the low, middle and high-income levels is too symmetrical (Table 6). Most of them earn average incomes, while just over a fifth of them are low earners. The share of high-income persons is the lowest.

A similar distribution of labour income is also observed among middle-aged employees. It differs from that of young people by the scope of the incomes in the end intervals. More than a quarter receive low remuneration, while just a little over a tenth of them receive a high income.

Table 6

Distribution of the age groups of employees by level of remuneration (in %)

	Youth	Middle age	Advanced age
Low income (below BGN 640)	23.7	26.7	54.2
Average income (BGN 641-1300)	60.5	59.4	38.5
High income (above BGN 1301)	15.8	13.8	7.3

Source. Author's estimates, based on the European Social Survey, 2018.

In contrast, the distribution of older employees is highly asymmetric. More than half of them receive low remuneration, while the share of middle level incomes is

just over one-third. The percentage of the persons in this group with high income is too low.

From a comparative point of view, young people experience the best distribution of remuneration. They have the highest proportion of high-income earners and the lowest percentage of low-pay earners. The elderly employed persons are in the most unfavourable position. In this age group, people with low pay dominate and the high-income earners are few. It is difficult to assess the extent to which the opinions given about incomes reflect the reality, since the sociological survey conducted in 2018 focused on other issues and not so much on incomes or the standard of living of the population.

Based on the respondents' opinions regarding the fairness of their labour incomes, their answers have been grouped, based on their age group. The results are presented in Table 7.

Table 7
Fairness of remuneration, by age groups

Age group	Unfairly low remuneration	Fair remuneration	Unfairly high remuneration	Average gross income in BGN
Youth (in %)	60.5	39.5	0	1024
Middle age (in %)	78.9	16.4	4.7	955
Advanced age (in %)	74.0	22.4	3.6	760

Source. Author's estimates, based on the European Social Survey, 2018.

The negative evaluations regarding the perceived unfairly low remuneration prevail in all age groups. The percentage of unsatisfied young people is the lowest compared to the other age groups. An analysis of the answers of the young people shows that those whose remunerations are below BGN 840 expressed extreme dissatisfaction. The percentage of young people who considered their salaries fair is quite high. These are young people with incomes over BGN 1,300. It is noteworthy that none of the young respondents considered their remuneration unfairly high.

Based on the given opinions on the fairness of the labour income, the following conclusions can be drawn regarding the youths' motives for work:

- A salary level of less than BGN 800 BGN 900 can hardly motivate young people to participate in the labour market;
- A more active participation in work activity can be expected when the salary is above BGN 1,300.

Middle-aged employees expressed the highest level of dissatisfaction with their level of labour remuneration. They make up almost 80% of the employed. For them, the dissatisfaction covers a very wide range of income. Almost all respondents with incomes below BGN 640 are dissatisfied. Employed persons with incomes of between BGN 800 and BGN 1,100 are also dissatisfied, but to a lesser extent. The percentage of employed persons satisfied with their remuneration is too low. Most of them receive an income above BGN 1,600. Given these rather heterogeneous subjective evaluations, it is difficult to specify any income limits that motivate people's

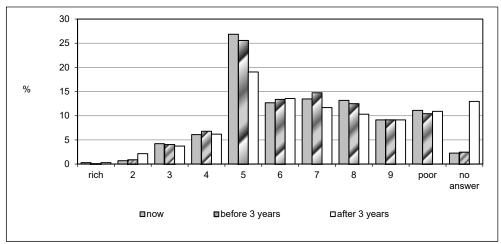
participation in the labour market. The main motive for participation in the labour market is the provision of some income for supporting the family. Despite this variety of subjective evaluations, a conclusion can be drawn that middle-aged people are ready to start working at the minimum wage, i.e. one greater than BGN 640.

Most older employees gave negative evaluations of their remunerations. Only one fifth of them considered their income fair. Everyone with incomes below BGN 480 rated the remuneration as completely unfair, while those with incomes within the interval BGN 640 – BGN 970 considered their earnings somewhat unfair. These evaluations suggest that a serious motive of older employees for refusing to participate in the labour market is an income below BGN 640. Few respondents in this group evaluated their remuneration as fair. About one-third of the positive evaluations were for incomes within the range of BGN 640 – BGN 1,100 and the rest were for remunerations higher than BGN 1,300. Therefore, incomes higher than BGN 1,300 are considered as a positive motive for participation in the labour market.

Feeling of poverty and opportunities for improvement of the living standard

Population income inequality is a major risk factor for the feeling of poverty. The survey data provide a good chance to evaluate the feeling of poverty in Bulgarian society at the present moment, three years ago, and in the next three years. The subjective feeling of poverty was estimated, based on a 10-score scale within the range "Rich-Poor". The distribution of persons according to their feeling of poverty is presented in Figure 7.

Figure 7
Feeling of poverty – at present, three years ago, and three years from now (in % of respondents)

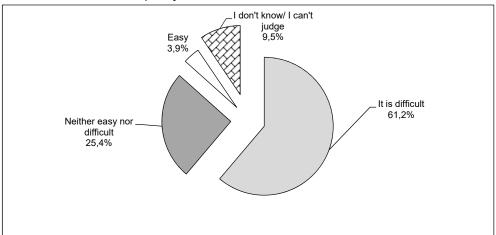


Source. Author's estimates, based on the European Social Survey, 2018.

The feeling of poverty in Bulgarian society is clearly expressed. More than 10% of the population feels poor, while the feeling of being rich is negligibly low (0.3%). This subjective feeling does not differ significantly in terms of time – at present, before three years and three years ahead. The majority of the population falls within the average positions (5, 6 and 7), i.e. neither poor nor rich. More than half of the respondents (53% and 53.7% respectively) put themselves in the middle of the rich-poor scale in terms of poverty, while expectations for the next three years are more pessimistic (44.3%). The most sensitive change concerns respondents' answers regarding the expectations for the future. The share of the "I don't know/can't judge" increased significantly (from 2.3% to 13%), while the share of the responses in the middle of the scale (position 5) decreased by 7.7 percentage points. Obviously, the uncertainty about the future is too high.

The high proportion of people, who feel poor, is also confirmed by the ability of households to "make ends meet". The data from the sociological survey show that nearly two-thirds of households in Bulgaria find it difficult to make ends meet (Figure 8). Of these, 29.5% find it very difficult to make ends meet, while the rest are faced with significant difficulties. At the other end of the pole are those that easily make ends meet. Their share is negligible (3.9%). About 1% of them make ends meet very easily, and the remaining 2.9% cope quite easily. The proportion of households for which it is neither difficult nor easy to make ends meet is about one quarter. It is noteworthy that the proportion of respondents who did not give an answer is too high, of which 8.8% are reluctant to answer.

Figure 8 The capacity of households to "make ends meet"



Source. Author's estimates, based on the European Social Survey, 2018.

A comparative analysis of the evaluations, based on the two indicators shows that they are very similar. The low share of households that easily make ends meet

is quite close to that of people who feel rich (the first three groups). A similar picture emerges at the other end of the distribution. The high share of households who experience difficulties in making ends meet corresponds to the share of those who feel poor or close to poverty.

The main conclusion that can be drawn is that the feeling of poverty is widespread among the Bulgarian population. In addition, a large proportion of households experience significant difficulties in securing a normal lifestyle.

The expectations for an improvement of the living standard are too pessimistic (Table 8). The majority of the Bulgarian population (more than half) expressed doubts about raising their standard of living in the near future, with more than half of them being firmly convinced that this will not happen. The opposite opinion is supported by about one fifth of the population. Among them, only 15% are firm believers in achieving a higher standard of living. The rest of this group have a hesitant opinion. A little more than 15% of Bulgarian society occupies a neutral position in terms of future expectations for improvements in the standard of living.

Table 8
Agreement with the statement about the improvement of the living standard (in %)

Completely agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Completely disagree	I don't know/ I can't judge
3.2	18.6	15.3	22.8	34.7	5.4

Source: Author's estimates, based on the European Social Survey, 2018.

Similar to the expectations regarding the imminent improvement of the standard of living, Bulgarians do not expect an improvement in their lives (Table 9). About a quarter of the population believes that improvements in their lives will not occur in the near future, while hesitators make up about one fifth. More generally, about half of the population (44.1%) disagrees with the statement that they expect an improvement in their lives.

Table 9
Agreement with the statement about the possibility for a better life (in %)

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Completely agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Completely disagree	I don't know/ I can't judge
3.0	15.5	16.0	18.8	25.3	21.3

Source: Author's estimates, based on the European Social Survey, 2018.

At the other end of the pole are the persons who expect a better life. The share of persons who fully or somewhat agreed with the statement about expecting a better life is too low (18.5%), and only about a third of them are firmly convinced. A small part of the population (16%) occupies a neutral position, while the percentage of those who are unwilling or unable to answer is too high (more than one fifth).

Summarizing the obtained evaluations, it can be argued that the Bulgarian population does not expect a significant improvement in living standard and life in general. The proportion of the pessimistic opinions is more than twice higher that the share of the positive ones.

Conclusion

The following summarized conclusions can be drawn from the analyses and estimates presented:

First, over the last few years, the labour market has seen a positive development in all its parameters – increases in employment and income, and a decline in unemployment and the inactive population. The willingness to participate in the labour market among the inactive population (in working age) is low and tends to decline further.

Second, in 2018, employees' remunerations represented low incentives for work self-realization for the following reasons:

- there was a high degree of differentiation of remunerations with a predominant share of persons with lower-than-average wages;
- the majority of employees (70-80%) considered their remunerations to be unfairly low;
- the majority of the employees were barely able to support their families with the remuneration they received.

Third, the age structure of the population has a significant impact on economic activity. The motives behind young people's economic activity are determined by their expectations for high pay (over BGN 1,300 in 2018), while the middle-aged people are motivated by remunerations higher than the minimum wage, and the older employees are motivated by remunerations above the average wage.

Fourth, inequality and poverty have little impact on economic activity. Despite the large income inequality and the feeling of poverty in the Bulgarian society, the readiness to participate in the labour market is decreasing. Moreover, expectations for improvements in the standard of living in the near future are too low.

Fifth, income protection policies should be updated in view of the high differentiation of remunerations and the development of inflationary processes. The application of a differentiated income tax scale is an appropriate change that is more purposeful than the reduction of the VAT for goods of first necessity. Gross income below BGN 1,000 should be protected by possible changes to its taxation and by applying a differentiated income tax scale from a certain amount downwards (conclusion for 2018).

Sixth, an overall adjustment to the minimum wage setting mechanism is needed, taking into account the share of persons with this level of pay and the share of persons with wages below the average gross wage. Given the high shares of these persons, it is socially fair to take into account the value of the median wage as well as its relation to the minimum and average wage. A possible change to the contractual relationships is also the consideration of the ratio between median and average wages.

Seventh, securing a decent labour remuneration requires parallel processes of increasing productivity, expanding investments in the real sector and intensifying the production in the direction of smart growth.

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