

The Impact of Precarity on Quality of Employment and Living Standards of Households of the Middle Generation Workers



**Igor A.
SHICHKIN**

Plekhanov Russian University of Economics
Moscow, Russian Federation

e-mail: shichkinia@mail.ru

ORCID: 0000-0002-3158-0648; ResearcherID: AAC-6086-2022



**Marina O.
KOZHEVNIKOVA**

Plekhanov Russian University of Economics
Moscow, Russian Federation

e-mail: Kozhevnikova.MO@rea.ru

Abstract. The relevance of the research topic is due to the growing impact of precarity on the quality of employment and standard of living among generational groups of economically active population. The opportunities and threats of current employment associated with standard of living may be manifested differently in these generational groups, especially among representatives of the middle generation. Information base of the study is compiled on basis of representative data from the Russia Longitudinal Monitoring Survey of HSE (RLMS-HSE) for 2021. A sample has formed among employed and unemployed people of the middle generation in age from 36 years up to retirement age. The results obtained denote that the presence of a high level of education and specialized ICT skills enables qualified representatives of the middle generation to ensure sustainable employment and minimize precarity risks. In general, a higher level of ICT skills increases the possibilities of the middle generation to apply their present

For citation: Shichkin I.A., Kozhevnikova M.O. (2024). The impact of precarity on quality of employment and living standards of households of the middle generation workers. *Economic and Social Changes: Facts, Trends, Forecast*, 17(3), 190–205. DOI: 10.15838/esc.2024.3.93.11

labor capacities in the labor market. It was discovered that precarious employment is found not only in poor population. It is common among all social groups according to living standards, while it is most evident among low-income households of middle generation workers with per capita incomes of 1–2 subsistence minimums. Taking into account the position of middle-generation people in employment, their qualification and educational characteristics, as well as level of ICT skills, this research has produced some recommendations, which will contribute to neutralize precarity threats and implement professional potential of middle-generation workers in order to enhance living standards of their households.

Key words: precarity, precarious employment, generational groups, households, middle-generation workers, quality of employment, standard of living, education, ICT-skills.

Acknowledgment

The research was supported by Russian Science Foundation grant 22-28-01043, <https://rscf.ru/project/22-28-01043/>, at Plekhanov Russian University of Economics.

Introduction

In modern economic dynamics imposed by capitalism, the chance to be employed in the long term is perceived as a privilege (Eichhorst, Marx, 2015). Neoliberal paradigm, which has dominated Russian system of social and labor relations over the past 20 years, has contributed to general expansion of precarity and emergence of new precarious employment forms. This has become a key factor in income inequality growth, social problems and decline in public trust in activities of government institutions (Baccaro, Howell, 2017).

Technological changes and development of information society have led to the fact that ICT skills and level of education have become effective drivers of professional development. They help people successfully adapt to changing demands of labor market and to increase their competitiveness (Bobkov et al., 2016). Levels of education and ICT skills are integral components of labor potential that can be used by both employed and unemployed individuals. They are indicators of employment quality, reflecting the level of professional training and role in division of labor system, which leads to differences in the concentration of precarity indicators across different generational groups and affects living standard of employed population

(Bobkov et al., 2022a; Bobkov et al., 2022b). However, not all generational groups have the same level of ICT skills and education, which creates inequalities between people and can impact their employment, career opportunities and standard of living. Therefore, for a deeper understanding and analysis of this problem, this research is being conducted, within the framework of which ICT skills levels, qualifications and education are considered as factors influencing segmentation of employed and unemployed citizens of the middle generation according to presence and concentration of precarity indicators. Obtained results indicate a relationship between levels of education, qualifications and ICT skills of the middle generation and the risks of precarity to which representatives of this age group are exposed. It has been established that the problem of employment precarity is widespread among all social groups in terms of living standards. Relationship between concentration of precarity indicators and employment situation of the middle generation (hereinafter also referred to as the generational group “Middle Generation”, “middle generation group”) actualizes the need to develop proposals aimed at neutralizing the threats of precarity, realizing educational potential

and using ICT skills middle generation to improve living standards of households. Therefore, this work aims to research precarity impact on employment quality and living standard of households of middle-generation workers. Research hypothesis contains a number of interrelated assumptions about the varying degrees of middle-generation participation in precarious work and its consequences for living standard of their households, depending on the middle-generation workers' employment status, skill level, education and ICT skills.

Scientific novelty of research lies in establishing relationship between concentration of precarity indicators and levels of ICT skills, qualifications and education of representatives of the middle generation, which determines their position in employment and standard of living. Practical significance of research is determined by ability to use the results in activities of government bodies, business community, educational institutions and trade union organizations.

Elaboration of the problem

A number of studies have noted a relationship between risks of precarious employment and age and gender characteristics of individuals (Broughton et al., 2016; Burgess et al., 2013). Young people tend to start their careers in precarized jobs. In middle age, associated with a higher level of education and qualifications, increased work experience, risks of precarity are declining (MacDonald, 2016; Grimshaw et al., 2016).

Young people and people of pre-retirement and retirement age are more likely to work in conditions of part-time, temporary, informal, episodic employment – forms of precarity (Precariat..., 2020).

Study by V.N. Bobkov, E.V. Odintsova, N.V. Bobkov presents research results of level and quality of employment in generational groups of working population (youth, middle and older generations)

and its influence on its distribution, taking into account compliance of per capita income of households with social standards. Level of employment and its quality in terms of prevalence of precarious employment have been identified and distribution of generational groups by per capita income in households has been obtained, taking into account employment and precarious employment indicators (Bobkov et al., 2021).

A.V. Popov analyzed and summarized domestic and foreign experience in identifying generational groups from perspective of social and labor relations. Two approaches are identified: the first is based on theory of generations of W. Strauss and N. Howe, the second is based on age. Advantages and disadvantages of these approaches are characterized (Popov, 2022a; Popov, 2022b).

A.V. Kuchenkova examines age-related differences in precarity degree of employment and nature of its relationship with subjective well-being of workers, perception of unstable conditions of employment and work activity. Based on national Russian survey of working population, author compares three age groups of employed people: under 29 years old, 30–49 years old, 50 years old and older. As a result of analysis, it was concluded that certain signs of precarity are more common among young people and less common among older people and middle-aged workers (Kuchenkova, 2022).

R. Donnelly's article, "Precarious work in midlife: Long-term implications for the health and mortality of women and men", found a correlation between precarious employment in midlife and adverse health outcomes in later life. Negative impact of precarious employment on physical and mental health of workers has been established in association with increasing risks of premature mortality due to prolonged stay in a precarious position (Donnelly, 2022).

In the course of analyzing differentiation of wages in generational groups of Russian population based on microdata from the Sample Observation of Population Income and Participation in Social Programs (VNDN), carried out by V.E. Gimpelson and D.I. Zinchenko, it was established that its peak values are observed at the age of up to 40 years, subsequently they have a downward trend. Authors associate decline in wages, which begins long before pre-retirement age, with outdated and not entirely relevant human capital of older generation. Researchers believe that in the future we can expect a redistribution of wage fund in favor of middle age groups (Gimpelson, Zinchenko, 2019).

In general, foreign and domestic studies of precarious employment focus on problems of young people and older generation (Precarious employment..., 2017; Doellgast et al., 2018). Meanwhile, aspects of employment precarity in relation to the quality of employment and living standard of the middle generation remain insufficiently developed, which predetermined the significance of this issue.

Research of precarity influence on employment quality and living standard of households of middle-generation workers seems important from the point of view of not only the wider numerical representation of this generational group but also its transitive property, which determines connection of the younger generation with the older age group. Identification of precarity employment risks in connection with quality of employment and living standard of the middle generation provides a methodological and regulatory foundation for strengthening labor potential of young people and for minimizing precarity risks impact on them in the process of transition to the middle generation group. Understanding the nature of precarity influence on employment quality and living standard of households of middle-generation

workers contributes to development of effective means to neutralize threats of precarity, implement educational potential and use of ICT skills of the middle generation to ensure necessary quality of employment and standard of living of households by the time they move to the older generation group.

Materials and methods

To conduct the study based on representative data of the 30th wave (2021) of the Russian Monitoring of Economic Situation and Population Health of the National Research University Higher School of Economics (RMEH NRU HSE), a sample was formed from people of the middle generation in the age from 36 years to retirement limits (in accordance with the transition period of pension reform for 2021 for women – 56.5 years; for men – 61.5). Among them the employed and the unemployed were identified (in accordance with ILO criteria). Analysis was carried out according to developed methodology for them. Research sample consisted of 3,100 people. Methodological solutions used in research to group representatives of the middle generation by level of qualifications, ICT skills, education and living standards, are based on the original authors' approaches published earlier (Bobkov et al., 2022a; Bobkov et al., 2022 b; Precarious employment..., 2019). At the same time, authors realize that the category analyzed in the age from 36 years to the retirement age is a rather heterogeneous social group, covering people with different life prospects, attitudes, values, labor potential and behavior, marital status, household composition, etc. As part of subsequent, more in-depth theoretical developments related to issues identified, it is advisable to consider influence features of precarity on employment quality and living standard of households of middle-generation workers, taking into account these socio-demographic characteristics.

Research presents representatives of the middle generation according to their employment status in three categories (groups):

- I. Engaged in the most skilled labor;
- II. Employed in skilled labor;
- III. Employed in unskilled labor.

Based on membership in an occupation group according to the National Classification of Occupations, representatives of the first group have the third and fourth (highest) level of qualifications (groups 1–3 and 01–02 according to the National Classification of Occupations). This group includes managers, specialists of higher and medium qualification levels, officers and non-officer military personnel. People engaged in skilled labor have the second level of qualification (groups 4–8 according to the National Classification of Occupations), these include employees engaged in the preparation and execution of documentation, accounting and maintenance; workers in service and trade sectors, protection of citizens and property; qualified workers in agriculture, forestry, fish farming and fishing; skilled workers in industry, construction, transport and related workers; plant and machine operators, assemblers and drivers. The first (lowest) level of qualification (groups 9 and 03 according to the National Classification of Occupations) is typical for people employed in unskilled labor from among workers without qualifications and ordinary military personnel.

The specifications of each employment situation group are determined by the level of education and

ICT skills of workers. Gradation of educational characteristics assumes presence of employed and unemployed people of the middle generation group, both with secondary vocational education and above and without vocational education. Ranking of ICT skills is based on a three-level classification:

- the third (highest) level of ICT skills includes specialized skills (ICT specialists);
- the second (medium) level of ICT skills involves user skills related to professional activities;
- the first (low) level of ICT skills covers basic skills not related to professional activities (Bobkov et al., 2022b).

To identify presence and concentration of precarious employment among people of the middle generation, the original authors' classification was used, including two groups of indicators of employment precarity (*Tab. 1*).

Employed people are divided into three categories based on presence and concentration of precarity indicators in percentage terms for each group.

1. Steadily employed (lack of indicators for employed).
2. Transition group (occupied with 1–4 non-key indicators).
3. Precariously employed (three levels of precarity indicators concentration):
 - 3.1. Moderate – employed with 1–2 key indicators;
 - 3.2. High – employed people have 1–2 key and 1–4 non-key indicators;

Table 1. Classification of indicators of precarious employment

Key indicators of employment precarity	Non-key indicators of employment precarity
(1) Employment based on verbal agreement without paperwork (2) Level of income from main employment that does not ensure stability of financial situation of households (3) Forced unpaid leave at initiative of employer (4) No paid leave (5) Employer reducing wages or reducing hours of work	(1) Self-employment in the informal sector (2) Wages arrears (3) Unofficial (partial or full) income from employment (4) Deviating from standard working hours: a working week of more than 40 hours or no more than 30 hours (at the main place of work)
Source: (Odintsova, 2023; Level and quality of life..., 2022).	

3.3. The highest are employed with 3–5 key indicators, which may be accompanied by 1–4 non-key indicators (Odintsova, 2023).

This typology with identical status range is taken as the basis for grouping employed and unemployed people of the middle generation according to living standards. Based on income and consumption criteria, four categories of households are identified:

- the least wealthy (poor);
- low-income;
- below average wealth;
- medium- and high-income (Bobkov et al., 2022a).

Results and discussion

Analyzing distribution of people employed in the most skilled labor of generational group “Middle Generation” by presence and concentration of precarity indicators and employment situation, it should be noted that the largest share of stable (48%) and precariously employed people

with different concentration levels of precarity indicators (9.3% – with the highest concentration of indicators) has the second (average) level of ICT skills (user skills related to professional activities; *Tab. 2*). This may be due to the higher level of ICT skills in the middle age group relative to the older generation, as well as prevalence of relevant professions in the age groups under 50 years old.

The least representative are groups of middle-generation workers with secondary vocational education and higher, who have the third (highest) level of ICT skills (specialized skills). Share of steadily employed people in this category was 7.3%. Meanwhile, among people employed in the most skilled labor with the third level of ICT skills, no employees with the highest concentration of precarity indicators were identified. This indicates that workers with high level of education and ICT proficiency have more stable jobs and are less likely to face employment precarity. In the transition

Table 2. Distribution of people employed in the most skilled labor of the generational group “Middle Generation” by presence and concentration of precarity indicators and employment situation, 2021

Characteristics of the group by employment status	Groups by presence and concentration of precarity indicators, % for each group				
	Sustainably Employed	Transition group	Precariously employed		
			With moderate concentration of indicators	With high concentration of indicators	With the highest concentration of indicators
Third (highest) level of ICT skills (specialized skills) – ICT specialists / Secondary vocational and higher	7.3	1.9	1.7	0.7	0.0
Second (medium) level of ICT skills (user skills related to professional activity) / Secondary vocational and higher, as well as without vocational education	48.0	25.2	39.6	22.3	9.3
First (low) level of ICT skills (basic skills not related to professional activities) / Secondary vocational and higher, as well as without vocational education	10.9	9.3	11.3	10.8	3.1

Note: The total value of columns is 100%.
 Source: own compilation based on RMEH by the National Research University Higher School of Economics.

group, there is a high proportion (25.2%) of middle-generation workers with the second (average) level of ICT skills.

Employed middle-generation workers with the first (low) level of ICT skills (basic skills not related to professional activities but necessary for use in everyday life: for communication, study, entertainment, etc.) are evenly distributed in groups according to their availability and the concentration of precarity indicators (from 10.9% – steadily employed to 10.8% – precariously employed with a high concentration of indicators). In this case, lack of specialized skills in the field of ICT, due to their lower importance in professional activity, does not act as a factor in employment precarity.

More detailed analysis of the data presented in Table 2 shows that the average level of ICT skills plays a significant role in ensuring employment for

the middle generation. This may be due to the fact that modern jobs increasingly require use of computer technology and information skills. Therefore, having an average level of ICT skills can be important factor in professional development. This also points to the need to improve workers' ICT skills to ensure competitiveness in labor market.

In the structure of middle-generation citizens employed in skilled labor, in terms of presence and concentration of precarity indicators and employment situation, people with a low level of ICT skills (basic skills not related to professional activity) and without vocational education predominate. Moreover, among them there is a significant proportion of precariously employed people with high (31.8%) and the highest (49.7%) concentration of precarity indicators (*Tab. 3*).

Table 3. Distribution of those employed in skilled labor in the “Middle Generation” generational group by the presence and concentration of precarity indicators and employment situation, 2021

Characteristics of the group by employment status	Groups by presence and concentration of precarity indicators, % for each group				
	Sustainably Employed	Transition group	Precariously employed		
			<i>With moderate concentration of indicators</i>	<i>With high concentration of indicators</i>	<i>With the highest concentration of indicators</i>
Second (medium) level of ICT skills (user skills related to professional activities) / Secondary professional and higher	4.0	1.6	4.5	3.9	2.5
First (low) level of ICT skills (basic skills not related to professional activity) / Secondary professional and higher	11.6	24.4	15.4	19.9	22.4
Second (medium) level of ICT skills (user skills related to professional activities) / Without vocational education	1.8	1.1	1.9	2.0	2.5
First (low) level of ICT skills (basic skills not related to professional activity) / Without professional education	13.8	33.6	19.5	31.8	49.7

Note: The total value of the columns is 100%.
Source: own compilation based on RMEH by the National Research University Higher School of Economics.

The lack of vocational education and the presence of basic, non-professional ICT skills among people employed in skilled labor of the middle generation group determines not only high concentration of precarity indicators but also their presence in the transition group (33.6%), forcing this category of citizens to balance between stable and precarious employment. Decrease in precarity and increase in stable employment of middle-generation citizens engaged in skilled labor correlate with expansion of ICT skills variability associated with professional activities, as well as increase in the level of education from secondary vocational and higher.

Considering distribution of people employed in unskilled labor in the middle generation group by presence and concentration of precarity indicators and employment situation, we can highlight a slight predominance of precariously employed people without vocational education with the first (low) level of ICT skills (basic skills not related to professional activity; *Tab. 4*).

Therefore, share of people with the highest concentration of precarity indicators is 6.8%. Similar indicators are lower for precariously

employed people with education at the secondary vocational level and higher. This value indicates that education can act as one of factors in reducing precarity of employment. The higher the level of education, the greater chances of a stable and well-paid job. Persons with a high concentration of precarity indicators often do not have professional education.

Unemployed people (people with extreme form of precarity – temporary unemployment) with secondary or higher vocational education and a higher level of ICT skills (specialized skills; ICT specialists) make up only 6% of the total number of unemployed in the middle generation group (*Tab. 5*), which is completely corresponds to the value of the third group of unemployed people without vocational education and with an average level of ICT skills. Meanwhile, the share of unemployed people with an average level of ICT skills (user skills related to professional activities) is many times higher (26%). The highest risks of acquiring unemployed status are associated with the first (low) level of ICT skills (basic skills not related to professional activity) and the lack of vocational education. The share of carriers of an

Table 4. Distribution of people employed in unskilled labor in generational group “Middle Generation” by presence and concentration of precarity indicators and employment situation, 2021

Characteristics of the group by employment status	Groups by presence and concentration of precarity indicators, % for each group				
	Sustainably Employed	Transition group	Precariously employed		
			With moderate concentration of indicators	With high concentration of indicators	With the highest concentration of indicators
First (low) level of ICT skills (basic skills not related to professional activity) / Secondary professional and higher	1.1	0.5	1.7	2.2	3.7
First (low) level of ICT skills (basic skills not related to professional activity) / Without professional education	1.5	2.4	4.4	6.4	6.8

Note: The total value of the columns is 100%.
Source: own compilation based on RMEH by the National Research University Higher School of Economics.

Table 5. Distribution of unemployed (people with extreme form of precarity – temporary unemployment) of the generational group “Middle Generation” by employment situation, 2021

Group	Characteristics of the group by employment status		% of the unemployed in the “Middle Generation” generation group
	Level of ICT skills	Level of education	
I. Unemployed people with secondary or higher vocational education and a high level of ICT skills	Third (highest) level of ICT skills (specialized skills), ICT specialists	Secondary professional and higher	6.0
	Second (medium) level of ICT skills (user skills related to professional activities)	Secondary professional and higher	26.0
II. Unemployed with secondary or higher vocational education and low level of ICT skills	First (low) level of ICT skills (basic skills not related to professional activities)	Higher education and higher	-
	First (low) level of ICT skills (basic skills not related to professional activities)	Secondary vocational	14.0
III. Unemployed without vocational education and with low and medium levels of ICT skills	Second (medium) level of ICT skills (user skills related to professional activities)	Without professional education	6.0
	First (low) level of ICT skills (basic skills not related to professional activities)	Without professional education	48.0

Note: “-” – there are not enough observations to conduct an assessment. Source: own compilation based on RMEH by the National Research University Higher School of Economics.

extreme form of precarity with these characteristics amounted to 48% of unemployed of the middle generation group.

Based on data in Table 5, we can conclude that the presence of professional education and specialized user skills related to professional activities does not guarantee protection against extreme form of precarity – temporary unemployment. Such a situation may indicate an imbalance of supply and demand in labor market or low demand and uncompetitiveness of such ICT skills. Acquiring the status of unemployed is associated with risks of drop in living standards, long-term unemployment and decrease in qualifications; it aggravates situation of unemployed if they lack vocational education and have a low level of skills in the field of information and communication technologies. According to research, almost half of unemployed citizens of the middle generation are at high risk of precarity and decline in living standards.

Impact of precarity on living standard of households of middle-generation workers

Assessing representatives of middle generation by presence and concentration of precarity indicators through the prism of living standards, it should be noted that the most representative in terms of coverage of both stable and precarious workers is the category of low-income households of workers with per capita incomes of 1–2 living wages (LW) and with income used for consumption in amount of 1–2 consumer baskets (CB). Share of steadily employed people with per capita incomes of 1–2 living wages is 37.6%, and with incomes used for consumption of 1–2 LWs– 56.8% (Tab. 6).

Next in the group of steadily employed citizens of the middle generation, in descending order, are households of workers who are well-off below average, with per capita incomes of 2–3.1 living wages – 31.4%, middle- and high-income households with per capita incomes of 3.1 living wages and above –26.3%. The list is completed

Table 6. Distribution of economically active population (EAP) of the generation group “Middle Generation” by presence and concentration of precarity indicators and standard of living, 2021

Living Standards Group	Groups by presence and concentration of precarity indicators, % for each group					
	Sustainably Employed	Transition group	Precariously employed			
			<i>With moderate concentration of indicators</i>	<i>With high concentration of indicators</i>	<i>With the highest concentration of indicators</i>	<i>Unemployed</i>
<i>Least affluent (poor)</i>						
With per capita income less than 1 living wage	4.7	12.2	11.0	10.6	15.3	44.7
With income used for consumption less than 1 CB	19.9	30.0	28.0	28.5	25.4	34.3
<i>Low income</i>						
With per capita income 1–2 living wages	37.6	42.5	53.0	54.1	61.0	45.6
With income used for consumption, 1–2 CB	56.8	55.4	58.8	58.3	60.2	60.2
<i>Wealthy below average</i>						
With per capita income 2–3.1 living wages	31.4	31.5	27.9	26.0	20.0	7.9
With income used for consumption, 2–3.1 CB	15.8	10.9	10.9	10.5	13.3	4.6
<i>Middle and high income</i>						
With per capita income 3.1 living wages and more	26.3	13.8	8.1	9.3	3.7	1.8
With income used for consumption 3.1 CB and more	7.5	3.7	2.3	2.7	1.1	0.9
Source: own compilation based on RMEH by the National Research University Higher School of Economics.						

by a small group of the least wealthy (poor) households of middle-generation workers with per capita incomes of less than 1 living wage – 4.7%. In this group share of steadily employed citizens with income used for consumption of less than 1 CB is 19.9%. Among the well-to-do below average with income used for consumption, 2–3.1 CBs – 15.8%. In the category of medium- and high-income people with income used for consumption of 3.1 CBs and more, share of steadily employed people is at the level of 7.5%.

An extremely high level (61%) of precarity with the highest concentration of indicators is observed among low-income households of middle-generation workers with per capita incomes of 1–2 living wages. Share of low-income households of middle-generation workers with moderate (53%) and high (54.1%) concentrations of precarity indicators is also significant. In the context of each group of precariously employed people based on the concentration of indicators of precarity, low-income households of workers with income used

for consumption in amount of 1–2 CBs average about 60%. This suggests that precarious employment is a problem affecting a large proportion of low-income, middle-aged segment of population. Such citizens face an increased risk of employment precarity, which significantly complicates their financial stability and social status. At the same time, the high percentage of precarity among members of this group indicates the need to take measures aimed at improving their economic situation.

Relatively high levels of precarious employment are typical for households of middle-generation workers with below-average income. However, unlike low-income households, this category of people with per capita incomes of 2–3.1 living wages demonstrates opposite dynamics, expressed in the predominance of employed people with a moderate concentration of precarity indicators (27.9%) over those with the highest concentration of indicators (20%). Share of precariously employed people with the highest concentration of indicators and consumption income of 2–3.1 CBs relative to the first two groups is low (13.3%).

Percentage of precariously employed people among the least wealthy (poor) with per capita incomes of less than 1 living wage varies in the range from 11% – a group with moderate concentration of indicators, which is approximately on the same level as the middle- and high-income ones, to 15.3% – a group with the highest concentration of precarity indicators. Over 28% of the least wealthy (poor) with income used for consumption of less than 1 CB are characterized by both moderate and high concentration of precarity indicators of employment.

The lowest concentration of precariously employed people was identified among medium- and high-income households of middle-generation workers with income used for consumption of 3.1

CBs and more. At the same time, representatives of this group with relatively high standards of living rarely act as carriers of extreme precarity and are practically not exposed to risks of temporary unemployment due to presence of professional education and ICT skills that correspond to high standards of living.

Share of unemployed in the group of middle- and high-income people with per capita incomes of 3.1 monthly income and more is only 1.8%, and among people with income used for consumption of 3.1 monthly income and more – no more than 1% (0.9%). As the level of income in households of middle-generation workers declines, share of unemployed increases across groups represented by living standards. If among wealthy below average this value varies in the range from 4.6 to 7.9%, then among poor and low-income people with per capita incomes of no more than 2 LWs, share of unemployed is about 45%. This high value indicates serious problems associated with providing employment for these groups and insufficient support from the state. A high level of unemployment (60.2%) is observed in the group of low-income people with income used for consumption in the amount of 1–2 CBs. Percentage of unemployed among the least wealthy (poor) with income used for consumption of less than 1 CB is almost twice as low. This is due to small representation of middle-generation people in this group in terms of living standards relative to other generational groups and their predominance in the group of low-income citizens. In terms of living standards, 42.5 and 55.4% of low-income households of middle-generation workers are in the transition group. Also represented there are the least wealthy (poor) with income used for consumption of less than 1 CB – 30%, and below average with income per capita 2–3.1 CBs – 31.5%.

Living standards models of households of middle-generation workers depending on concentration of precarity indicators and characteristics of employment situation

Research results on distribution of employed and unemployed people by income level generally characterize the modern model of socio-economic differentiation, which makes absolute limited opportunities for overwhelming majority of households of middle-generation workers to obtain higher labor incomes and improve living standards. Data shows a significant gap between those who have access to high-paying jobs and those who earn below the medium income. It is important to note that such differentiation not only aggravates social inequality but also creates serious obstacles to improving living standard of country's population.

Middle-generation workers with higher levels of ICT skills are more likely to earn employment income needed to support average and above-average household incomes. It is likely that the higher the ICT skills level, the wider the range of opportunities to "convert" them into higher employment income. This statement is true without taking into account differentiation of income from employment depending on industry: employment with the same level of ICT skills in different industries can provide different levels of income. Analysis of share of unemployed in different groups with different income levels allows us to conclude that the lower the income, the higher the share of unemployed. This circumstance requires increased attention and measures from government to reduce unemployment and support low-income citizens.

Characterizing living standard models of households of middle-generation workers depending on concentration of precarity indicators and specification of their employment situation, it is necessary to highlight some features inherent in groups in question in terms of living standards.

Least wealthy (poor)

Approximately a quarter of the least wealthy households of middle-generation workers are exposed to risks of precarity and almost 45% are carriers of the extreme form of precarity – temporary unemployment. It is well known that unemployed citizens, especially for a long period, are in an unfavorable situation and experience financial difficulties. Problems of low quality of employment and low labor income negatively affect living standard of unemployed, low-income citizens and members of their households. These households are faced with the need to survive on income that is insufficient to meet basic human needs, with limited opportunities to improve their own situation. Overcoming this situation requires systemic measures to combat precarity and create real conditions for decent work.

Low income

Precarious employment is widespread, mostly among low-income households of middle-generation workers with per capita incomes of 1–2 LWs. Low-income households of middle-generation workers are in a complex contradictory situation. They do not fall into category of poor but cannot be considered wealthy either. Labor activity that generates an income of less than two subsistence minimums indicates low quality of employment and low standard of living. Low income may be result of insufficient wages, lack of stable employment or limited opportunities for professional growth, which are key markers of precarity, concentration of indicators of which is most pronounced in this group. A low level of income from primary employment can lead to financial deficit, making it difficult to cover the basic needs of employed people and their families for quality food, medical care, housing and education. In this regard, there is a need for government policies aimed at increasing incomes and ensuring equal opportunities for all employed citizens.

Wealthy below average

Among households of workers in this group with income used for consumption in the amount of 2–3.1 CBs, the majority are employed, whose concentration of precarity indicators is moderate. This may be due to the fact that this category of people has a certain stability of income and a higher standard of living compared to the first two groups. Despite this, the group also represents a considerable proportion of employed people with the high (26%) and the highest (20%) concentration of precarity indicators, which may be caused by lack of qualifications, lack of opportunities for career growth or underemployment. At the same time, the group is not homogeneous; within it there may be people with different professions, age cohorts, education and level of ICT skills. These factors can determine quality of employment and help improve living standard of this category.

Middle and high income

Representatives of this group are less exposed to risks of precarity, including its extreme form, due to presence of professional education and developed ICT skills. However, this category of households may face other problems, such as stress, overexertion and imbalance in work-family-life balance. Within this issue, additional research is needed to establish relationship between these negative effects and employment precarity of medium- and high-income households of middle-generation workers.

In modern realities of globalization processes intensification and rapid development of information and communication technologies, strategic vector to limit precarious employment spread, improve standard of living and quality of employment for all workers, including representatives of the middle generation, should be an absolute priority of state policy. We consider it advisable to formulate a number of practical recommendations aimed at neutralizing threats of precarity, implementing educational potential and using ICT skills of the

middle generation to improve standard of living of households:

- minimize share of fixed-term labor agreements and temporary contracts in public sector, to reduce use of contractors, temporary and freelance positions in it;
- create transitive programs for transition from temporary to permanent jobs;
- make social protection more inclusive to ensure basic guarantees and facilitate access for middle-generation workers with a high concentration of precarity risks;
- use of temporary workers should be subject to legal restrictions;
- establish decent jobs as a priority over transnational profits in trade agreements;
- maintain regular group meetings or actively seek feedback to analyze problems and ideas of middle-generation workers and partner with them to find solutions or to improve working conditions;
- promote inclusive workforce initiatives, such as career planning at the start of any period of non-regular work and expanding training opportunities to place middle-generation workers in precarious jobs;
- create trust funds to provide temporary financial support for workers of the middle generation group with the highest concentration of precarity indicators and low levels of ICT skills;
- conduct regular advanced training in digital literacy programs for middle-generation workers with low levels of ICT skills employed in low-paid and unstable jobs in health care, elderly and child care sectors;
- expand list of electronic services and Internet resources aimed at users with any level of ICT skills, intended for unemployed middle-generation citizens who have difficulty finding work;
- apply tools of socially responsible restructuring in the process of releasing middle-generation workers with the high and highest concentration of precarity indicators.

Conclusion

Summarizing research results, it should be concluded that high level of education and specialized ICT skills corresponds with stable employment and the lowest risks of precarity. Due to improvement in quality of employment, determined by higher levels of ICT skills, qualifications and specialization, risks of precarity are reduced. Problem of employment precarity is not limited only to the poor. It is common among all social groups according to living standards. Precarity affects not only economic sphere but also negatively affects psychological and physical health of people, leading to decrease in their standard of living and social instability.

Employed Russians have more developed digital competencies than unemployed ones. Among unemployed with low and medium levels of ICT skills, high risks of not realizing their labor potential were identified (48%). Middle-generation workers with professional education have greater opportunities in labor market and are more

likely to apply for decent jobs. At the same time, unskilled labor remains one of the main sources of precarity, which is reflected in low levels of ICT skills and lack of vocational education among this group of workers. However, labor precarity is not limited to unskilled workers. In some cases, people with a high level of education, including those employed in the most skilled labor, are exposed to risks of precarity due to unfavorable economic conditions, technological changes and other factors. Therefore, to increase competitiveness and adaptability to changes in labor market, it is important to carry out continuous training and improve ICT skills¹.

In the context of the growing influence of precarity on employment quality and living standard of households of middle-generation workers, it is extremely important for all interested parties to carry out systematic activities to minimize negative effects of this phenomenon and maximize use of education and ICT skills to improve living standard of this generational group.

References

- Baccaro L., Howell Ch. (2017). *Trajectories of Neoliberal Transformation: European Industrial Relations since the 1970s*. Cambridge: Cambridge University Press.
- Bobkov V.N. (Ed.). (2017). *Neustoichivost' zanyatosti: mezhdunarodnyi i rossiiskii konteksty budushchego sfery truda* [Precarious Employment: International and Russian Contexts of the Labor Sphere Future]. Moscow: RealPrint (in Russian).
- Bobkov V.N. (Ed.). (2019). *Neustoichivaya zanyatost' v Rossiiskoi Federatsii: teoriya i metodologiya vyyavleniya, otsenivanie i vektor sokrashcheniya* [Precarious Employment in the Russian Federation: Theory and Methodology of Identification, Estimation and Vector of Reduction]. Moscow: KNORUS (in Russian).
- Bobkov V.N. et al. (Eds.). (2022). *Uroven' i kachestvo zhizni naseleniya Rossii: ot real'nosti k proektirovaniyu budushchego* [Standard of Living and Quality of Life of Russian Population: From Reality to Forecasting the Future]. Moscow: FNISTS RAN. DOI: 10.19181/monogr.978-5-89697-388-1.2022
- Bobkov V.N., Novikova I.V., Shichkin I.A., Bobkov N.V. (2016). Contemporary information technologies for employment regulation: transition from precarious work to stable employment. *Uroven' zhizni naseleniya regionov Rossii=Living Standards of the Population in the Regions of Russia*, 4(202), 47–59. DOI: 10.12737/24233 (in Russian).

¹ From precarious work to decent work: Outcome document to the workers' symposium on policies and regulations to combat precarious employment (2012). International Labor Office, Bureau for Workers' Activities. Geneva: ILO.

- Bobkov V.N., Odintsova E.V., Bobkov N.V. (2021). The impact of the level and quality of employment in generational groups on the distribution of the working-age population by per capita income. *Sotsial'no-trudovye issledovaniya=Social & Labour research*, 3(44). Available at: <https://cyberleninka.ru/article/n/vliyanie-urovnyai-kachestva-zanyatosti-v-pokolennyh-gruppah-na-raspredelenie-trudosposobnogo-naseleniya-po-dushevym-denezhnym> (in Russian).
- Bobkov V.N., Odintsova E.V., Ivanova T.V., Chashchina T.V. (2022a). Significant indicators of precarious employment and their priority. *Uroven' zhizni naseleniya regionov Rossii=Living Standards of the Population in the Regions of Russia*, 18(4), 501–519 (in Russian).
- Bobkov V.N., Odintsova E.V., Shichkin I.A. (2022b). The impact of precarity on the standard of living and employment situation of Russian youth. *Rossiiskii ekonomicheskii zhurnal=Russian Economic Journal*, 4, 93–113. Available at: <https://doi.org/10.33983/0130-9757-2022-4-93-113> (in Russian).
- Broughton A., Green M., Rickard C. et al. (2016). *Precarious Employment in Europe: Patterns, Trends and Policy Strategies*. Brussels: European Parliament, Committee on Employment and Social Affairs.
- Burgess J., Connell J., Winterton J. (2013). Vulnerable workers, precarious work and the role of trade unions and HRM. *International Journal of Human Resource Management*, 24(22), 4083–4093.
- Doellgast V., Lillie N., Pulignano V. (2018). *Reconstructing Solidarity: Labour Unions, Precarious Work, and the Politics of Institutional Change in Europe*. Oxford: Oxford University Press.
- Donnelly R. (2022). Precarious work in midlife: Long-term implications for the health and mortality of women and men. *Journal of Health and Social Behavior*, 63(1), 142–158. DOI: <https://doi.org/10.1177/00221465211055090>
- Eichhorst W., Marx P. (Eds.). (2015). *Non-standard Employment in Post-Industrial Labour Markets*. Cheltenham: Edward Elgar.
- Gimpel'son V.E., Zinchenko D.I. (2019). *Tsena vozrasta: zarabotnaya plata rabotnikov v starshikh vozrastakh* [The Price of Age: Wages of Workers at Older Ages: Preprint]. Moscow: Izd. dom Vyshei shkoly ekonomiki. (Seriya WP3 "Problemy rynka truda") (in Russian).
- Grimshaw D., Johnson M., Rubery J., Keizer A. (2016). *Reducing Precarious Work. Protective Gaps and the Role of Social Dialogue in Europe*. Manchester: European Work and Employment Research Centre, University of Manchester.
- Kuchenkova A.V. (2022). Employment precarity and the subjective well-being of employees in different age groups. *Sotsiologicheskii zhurnal=Sociological Journal*, 28(1), 101–120. DOI: 10.19181/socjour.2022.28.1.8840 (in Russian).
- MacDonald R. (2016). Precarious work: The growing precariat of youth. In: Furlong A. (Ed.). *Routledge Handbook of Youth and Young Adulthood*. London: Routledge.
- Odintsova E.V. (2023). Realization of the labor potential of employees in the quality of their employment and the standard of living of households. *Uroven' zhizni naseleniya regionov Rossii=Living Standards of the Population in the Regions of Russia*, 19(1), 99–111. DOI: 10.52180/1999-9836_2023_19_1_8_99_111 (in Russian).
- Popov A.V. (2022a). Implications of precarity in the context of generational groups: direct and indirect effects. *Ekonomicheskie i sotsial'nye peremeny: fakty, tendentsii, prognoz=Economic and Social Changes: Facts, Trends, Forecast*. 15(6), 167–181. DOI: 10.15838/esc.2022.6.84.10 (in Russian).
- Popov A.V. (2022b). Generation groups in the context of social and labour relations: Theoretical aspects. *Ekonomika truda*, 9(12), 1971–1984. DOI: 10.18334/et.9.12.116697 (in Russian).
- Toshchenko Zh.T. (Ed.). (2020). *Prekariat: stanovlenie novogo klassa: kollektivnaya monografiya* [Precariat: The Emergence of a New Class: Collective Monograph]. Moscow: Tsentr sotsial'nogo prognozirovaniya i marketinga.

Information about the Authors

Igor A. Shichkin – Candidate of Sciences (Economics), associate professor of department, Leading Researcher, Plekhanov Russian University of Economics (36, Stremyanny Lane, Moscow, 117997, Russian Federation; e-mail: shichkinia@mail.ru)

Marina O. Kozhevnikova – Assistant and graduate student of department, Leading Specialist, Plekhanov Russian University of Economics (36, Stremyanny Lane, Moscow, 117997, Russian Federation; e-mail: Kozhevnikova.MO@rea.ru)

Received November 2, 2023.