

WORKERS' RESOURCES AND TRAJECTORIES

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© **Sizova I.L., Elagina E.D., Orlova N.S.**

SHORTAGE OF (QUALIFIED) PERSONNEL ON THE LABOR MARKET IN RUSSIA: CURRENT RISKS



IRINA L. SIZOVA

St. Petersburg State University
Saint Petersburg, Russian Federation
e-mail: sizovai@mail.ru

ORCID: [0000-0001-5656-0670](https://orcid.org/0000-0001-5656-0670); ResearcherID: [AAJ-7300-2020](https://orcid.org/AAJ-7300-2020)



ELENA D. ELAGINA

St. Petersburg State University
Saint Petersburg, Russian Federation
e-mail: st098982@student.spbu.ru

ORCID: [0000-0001-8602-3470](https://orcid.org/0000-0001-8602-3470); ResearcherID: [IUM-6888-2023](https://orcid.org/IUM-6888-2023)



NATALIA S. ORLOVA

St. Petersburg State University
Saint Petersburg, Russian Federation
e-mail: orloka135t@mail.ru

ORCID: [0000-0002-4018-2940](https://orcid.org/0000-0002-4018-2940); ResearcherID: [IUM-7968-2023](https://orcid.org/IUM-7968-2023)

The relevance of the research topic lies in the fact that the problem of labor shortage is currently being actively discussed in Russia. The formation and effective implementation of the country's labor potential is hindered by a number of factors, we can highlight demographic, socio-economic, organizational, professional-qualification and educational ones among them. Taking into account the current situation in the labor market, the article discusses the key social factors of the risks of developing the deficit of qualified personnel in certain sectors of the economy and regions. The aim of the study is to identify and characterize the key risks provoking the deficit of highly qualified personnel in the country in the current conditions. Using general scientific means and methods of analysis and comparison, generalization of actual data and expert assessments, the authors came to the conclusion that along with the long-term reduction in the number of able-bodied persons, the level of qualification

of Russian workers is deteriorating. This circumstance is connected with the slow adaptation of young workers, the instability of workers' employment in certain sectors of the economy due to economic crises and social problems, and the rapid changes in the labor market itself. Development and investment in labor resources is essential for success in the modern world. The highest priority is given to qualified personnel with modern technologies and in-demand competencies. The availability of qualified personnel contributes to improving the quality of products or services, increasing productivity, reducing the risk of errors, strengthening competitiveness, development of innovations in enterprises and organizations. Enterprises' investments in the improvement of personnel policy and corporate educational programs, the development of mentoring system is an important strategic step for successful development in the long term.

Personnel, shortage, education, qualification, competences, labor market, risks.

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Introduction

In the modern world, education is the most important factor ensuring economic growth and social stability through the development of labor potential. The presence of educational capital in workers determines their ability to be employed, i.e. the desire for continuous learning, self-development and self-realization. The extent to which workers have developed these skills, they are competitive in the modern labor market.

In the era of technological progress and innovation, tougher economic competition, the training of qualified personnel and systematic development of human potential become critical for the socio-economic development of a country. Experts emphasize the special role of education and qualification of workers due to the advent of the fourth industrial revolution (industry 4.0) (Ras et al., 2017) and the rapid growth of technology¹. In Russia, the imposition of sanctions by unfriendly countries became the reason for the transition to a new state strategy to ensure technological sovereignty².

The processes taking place in the economy and society form new requirements to the education and qualification of workers

(Kuzmina, Alberisio, 2011). Most of the duties performed at workplaces are becoming diverse and interdisciplinary (Ras et al., 2017). Modern workers must possess a significant number of competencies, among which creativity, social intelligence, innovativeness, and an integrated approach are increasingly valued (Letmathe, Schinner, 2017). It is currently believed that employees should possess more cognitive competencies than physical strength. Such competencies include primarily mathematical and engineering knowledge. Along with this, modern workers should have a high degree of sensitivity to information (data) and working with it. In general, scientific literature provides a rather broad and diverse list of requirements (Ziegler, Tenberg, 2020; Zirnig, Klein, 2019; Kurz, Pfadenhauer, 2010), among which specific skills related to understanding and managing automated processes and systems, use of technology, business analytics and many others are indicated. Employees are asked to show the ability to negotiate, demonstrate the presence of communication and language competencies, somehow provide social skills (discipline, teamwork skills, reliability, responsibility, etc.). In addition, significant changes are taking place

¹ Employer Skills Survey 2015: UK Results. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/704104/Employer_Skills_Survey_2015_UK_Results-Amended-2018.pdf

² Why technological sovereignty is important for Russia. Available at: <https://www.rbc.ru/newspaper/2022/06/10/62a0e95b9a79472d8b713207>

in terms of redistribution of qualified personnel between industries and activities (Koksharova et al., 2019). A significant contribution to the processes of labor force spillover is made by the development of new, atypical forms of employment (Kubishin, 2021; Nureev, Akhmadeev, 2021; Chekmarev et al., 2022).

Thus, the achievement of key objectives of national and federal projects, scientific and technical development of the country, increase in GDP and industrial production, fulfillment of the state defense order (SDO), import substitution, development of vital areas and digital economy, provision of affordable and high-quality medical care, upbringing of younger generations and many other things are directly related to the development of human resources. In today's situation, human resources are becoming a vital asset for every enterprise and the country as a whole. Deputy Prime Minister of the Russian Federation T. Golikova points to a shortage of about 1 million workers³.

The abundance of scientific literature, studies and expert assessments on the topic of training for the modern economy, both foreign and Russian, is mainly devoted to the scientific analysis of the qualifications and competencies of workers⁴ in demand today (Konstantinovsky, Popova, 2020; Karavay, 2021, etc.). To a lesser extent, researchers' attention is focused on the study of processes and factors affecting the change of human and labor resources (Tikhonova, Karavay, 2018) and related socio-economic consequences. In this article, based on open sources, published factual information and expert assessments, an attempt is made to indicate and characterize the key social factors that directly or indirectly affect the development of human resources deficit in certain industries and sectors of the economy, regions of the country. Special attention is paid to the discussion of the possible causes of the rapidly growing crisis of skilled labor in the

country, without which technological progress and sustainable development are impossible in the modern world.

The aim of the paper is to identify and characterize the key social factors contributing to the development of the risk of staff shortage in the Russian economy. The first part of the paper analyzes the importance of human resources and the development of qualified personnel for the economy and sustainable development of the country. The key factors affecting the deficit of qualified personnel are pointed out, and the measures taken by the state in the new conditions are discussed. The second section is devoted to the review and generalization of the current state of the labor market in Russia and the problem of development of qualified personnel on the basis of expert assessments and analysis of available factual data. The conclusion summarizes the new qualities of the workforce needed to solve the tasks set for the country. The review and generalization of the results of scientific literature, sociological research data and expert assessments in the article are implemented on the basis of traditional methodology of scientific knowledge using the means of analysis, synthesis, classification method and study of the dynamics of processes and phenomena.

The importance of qualified personnel in the labor potential: a theoretical analysis

The expectations of the labor market with regard to employees are based on the most popular today concept of labor potential. In general terms, labor potential characterizes the population capable of socially useful work of varying degrees of complexity on the basis of acquired education and qualifications, as well as work experience (Gorbunova, Kondrashova, 2012). However, the concept itself emphasizes the socio-demographic characteristics of

³ Golikova: Russia lacks at least one million labor resources. Available at: <https://rg.ru/2023/06/16/reg-szfo/golikova-rossii-ne-hvataet-ne-menee-odnogo-milliona-trudovyh-resursov.html> (accessed: June 22, 2023).

⁴ Vishnevskaya N.T. (Ed.). (2017). Professions in the Russian labor market: Analytical report of the National Research University Higher School of Economics. Moscow: Izd. dom HSE. Available at: <https://publications.hse.ru/mirror/pubs/share/folder/kd714ks118/direct/205016549>; Pissarides K., Margania O.L., Belozherov S.A. (Eds.). (2018). Employment and economic growth. Saint Petersburg: Izd-vo SPbSU.

the worker (primarily age), based on which the degree of labor capacity is determined. In addition, the overall assessment of labor potential in Russia is often negative. This is due to various reasons, among which such reasons as poor receptivity to innovations, shortage of highly qualified specialists, inefficient use and lack of mechanisms for its increase through training and development of new competencies, poor support from the state prevail. This idea is confirmed by a number of authors who point out that the problem of reproduction of labor potential is related to the effectiveness of health care and education system functioning, as these factors affect the implementation of labor activity at a high professional level (Sleptsova, Uzunyan, 2016). A certain influence on the reproduction of labor potential is exerted by the political situation in the country and people's trust in the power structures, as well as the desire to develop for their own good (Vasilyev, 2010). Thus, a healthy and educated worker contributes to the development of production, improvement of technologies, increase in productivity and reduction of enterprise costs, i.e. is a key factor in the economic success of the country and the development of society as a whole.

According to Russian authors' estimates, the modern structure of labor potential includes: health; morality and ability to work in a team; creative potential; activity; organization and assertiveness; education; professionalism (Kirillova, Savina, 2014). Labor potential is usually differentiated also by quantitative and qualitative parameters and in the regional context, since there are quite radical differences and fluctuations, specific profiles and sets of factors influencing its development in the country. Regional labor potential is broken down into the following components: educational and qualification, intellectual, innovation and entrepreneurial, and reputation and communication (Hadasevich, 2014).

The current volumes of regional labor potential differ to a large extent by the share of youth in their composition. The youth part of the Russian labor potential is important for

the development of the country's skilled forces. The share of young people is significantly lower in those regions that have a long-term low birth rate (e.g., Central Russia). In some regions (primarily in the North Caucasus, national republics and autonomous districts), the share of young labor force is significantly higher than the Russian average (Rusanovsky et al., 2014).

The central parameter of labor potential is the level of education and qualification of workers. In modern economics, the relationship between them is especially valued, as it determines the ability of a worker to perform specific tasks. While education indicates a certain area of professional knowledge, qualification indicates the accumulated level and quality of a worker's knowledge and skills. Qualification is summarized on the basis of the duration of education and work experience in the obtained specialty. According to the level of qualification, workers are divided into four groups: highly skilled, skilled, low-skilled and unskilled (Pokropivny, 2003).

The traditional approach to understanding workers' qualifications needs to be revised in line with new requirements, as does the system of specialist training. Complex technologies and the speed of production renewal especially stimulate this modernization. In post-industrial society, a new type of professional who possesses not only in-depth professional knowledge, but also their qualitative diversity is increasingly in demand (Tretyakova, 2019). In general, new skilled forces are the core of modern economy (Demiroglu, Asanova, 2016), which it is still unable to be obtained⁵. New skilled forces play an important role in economic development because they can improve labor productivity, improve technology and stimulate innovation. Consequently, for the development of the economy it is important to create conditions for training and attracting new personnel, as well as to improve the skills of existing employees.

A significant problem in providing the Russian economy with qualified personnel is the imbalance between the system of professional training and the labor market requirements for education and qualification of

⁵ Projects of Russia. Available at: <https://rg.ru/2023/04/18/dlia-razvitiia-rossii-gotoviatsia-novye-kadry.html>

employees (Aranzhin, 2017). As a consequence, there is a growing deficit of qualified personnel in the country. The reasons for this situation lie in the orientation of professional training not to the needs of the labor market, but to the demands of customers of educational services. As a result of the underdeveloped system of professional orientation, the number of specialists of unclaimed directions multiplies and the number of workers employed outside their specialty grows. According to the Russian Ministry of Education and Science, by the end of December 2022, almost 50% of graduates were not working in their specialty, which also complicates the situation in certain sectors of the economy⁶.

In addition, these risks are caused by the insufficient level of specialists' training in the system of vocational education. Firstly, the level of vocational education received in Russia is decreasing due to commercialization and insufficient financial investments on the part of the state. The share of the commercial segment in the structure of all types of vocational education is steadily increasing. In 2021, commercial training accounted for 5.9% of skilled workers, 39.6% of middle-level specialists and 52.2% of specialists with higher education (Kolesnikova et al., 2023). Underfunding of educational institutions has led to a sharp decline in the number of young teachers with candidate and doctoral degrees, who should train and produce highly qualified personnel for the Russian economy. The decrease in the volume of defenses since 2018 was the result of the measures taken – audit of dissertation councils and analysis of defenses of previous years, but in 2022 the rate of dissertation defenses compared to 2018 increased by 20%, which is due to the adoption of new rules for the evaluation of works and their defense among applicants for a scientific degree⁷. According to the latest

census, there are 362.8 thousand candidates and 78.9 thousand doctors of science in Russia⁸. According to the results of the previous census, which was conducted in 2010, there were 64% more candidates of science, and 58% more doctors of science (595.5 and 124.3 thousand respectively). The output of scientific personnel is affected by the reduction of budgetary places and the increase in the cost of postgraduate education.

Secondly, despite all efforts to push technical, natural-science specialties, there is still an imbalance between humanitarian and technical education in the country. According to the latest data (2021) of the Ministry of Education and Science, “Law” has long been the most preferred field of study among entrants. In total, as of 2021, this specialty was mastered by 332 thousand people. The second place was occupied by “Economics” (274 thousand people). The third most popular specialty is “Management” – 179 thousand people⁹.

Thirdly, the problems in the training of qualified personnel were exacerbated by the pandemic situation, as the acquisition of knowledge by students was complicated by a number of factors, including the unpreparedness of universities for the rapid transition to the distance format. As a result, the conjugation of supply and demand in the labor market is reduced, and the quality of labor force falls due to its unclaimedness (Marien, Melnikova, 2019; Sizova et al., 2022). An artificially created shortage of personnel is formed, which is a consequence of the lack of educational programs aimed at the labor market and the growing number of professionals unable to find a job.

Nowadays, qualified personnel play an important role in the economy of any country. They are considered as an asset of an enterprise. This means that employees have the knowledge and skills that enable them to perform tasks within the digital economy. They are able to

⁶ The Ministry of Education and Science reported that almost 50% of Russian university graduates do not work by occupation. Available at: <https://tass.ru/obschestvo/16597511>

⁷ Falkov reported a 20% increase in the number of dissertation defenses in Russia in 2022. Available at: <https://nauka.tass.ru/nauka/16870039>

⁸ All-Russian census of the population in 2020. Available at: https://rosstat.gov.ru/vpn_popul.

⁹ Education in figures (2022): Concise statistics collection. Available at: <https://issek.hse.ru/mirror/pubs/share/749756927.pdf>.

adapt quickly to technological changes, master innovations and technologies, work to create new products and services, and meet the requirements for optimizing business processes. Such requirements to employees stimulate the processes of permanent development of qualifications, on the one hand, and the problem of the increasing cost of skilled labor, on the other. Because of this, many companies, especially small and medium-sized enterprises, will face the problem of skilled labor shortage (Matt et al., 2018). Experts believe that the development and implementation of artificial intelligence algorithms in labor processes will reduce the need for human resources (Frey, Osborne, 2013). At the same time, companies are increasingly looking to invest in staff development. This approach includes various initiatives, such as the creation of corporate universities at systemically important (large) employers, the development of a corporate culture focused on the needs of employees, the expansion of employers' responsibilities to employees, and the introduction of a mentoring system. Thus, enterprises are not so much reducing the requirements to applicants and are ready to hire anyone who wants to work, as they are trying to expand their own social programs aimed at personnel development. It is gradually becoming clear that the problem of insufficient qualification of employees is related, among other things, to the unwillingness to maintain the qualification of employees, to train and mentor employees without work experience or those who have returned to work after a long break.

It is considered necessary for the government to develop effective forecasts of labor force development in the country and, based on these forecasts, to develop targeted programs to transfer labor force from labor-surplus to labor-deficit areas and industries¹⁰. Thus, in economic analysis the understanding of labor shortage is associated with the situation in the

labor market, when the number of job offers exceeds the demand for them on the part of job seekers (not enough labor force). Often the labor shortage so understood is observed only in certain sectors of the economy or types of professional activities. Shortage of personnel is also possible in certain regions of the country due to unfavorable working conditions or due to the lack of local training of required specialists.

In Russia, the risks of developing a deficit of qualified personnel are clearly pronounced. In connection with the conduct of the special military operation, there is an outflow of some specialists abroad, to certain regions of the country or to other areas of activity. Although some specialists continue to work remotely, and some more are likely to return after the end of hostilities, the shortage of qualified personnel may worsen in remote and small regions of Russia. For example, in the Northern and Far Eastern regions, thanks to high salaries, there is no shortage of specialists in the oil and gas industry, but there is a catastrophic shortage of qualified medical, education, and social services personnel¹¹.

One of the major reasons for the shortage of qualified personnel is the continuing decline in the country's population. Despite the expected doubling of the number of high school graduates in the near future, the working-age population is shrinking due to external events. According to Rosstat data, as of January 1, 2022, the total population was 145 478,097 people, with a significant decline in 2020¹². At the same time, the working age population decreased and the share of young people decreased significantly (Drobot et al., 2020; Cherednichenko, 2020). In addition to the coronavirus pandemic, the outflow of citizens abroad and the death of young men in the line of duty during the special military operation are added to the number of obvious negative processes¹³. The loss of able-bodied population can be partially compensated by the annexation of new territories (according

¹⁰ The Minister of Labor spoke at SPIEF about the regions with unemployment problems. Available at: <https://lenta.ru/news/2023/06/16/trd>

¹¹ Pros and cons of the self-employment regime: survey results. Available at: <https://odintsovo.hh.ru/article/26512>

¹² Population of Russia: size, dynamics, statistics. Available at: <http://www.statdata.ru/russia>.

¹³ Population of the Russian Federation by sex and age as of January 1, 2022. Available at: https://rosstat.gov.ru/storage/mediabank/Bul_chislen_nasel-pv_01-01-2022.pdf

to preliminary estimates, the population of Russia has a chance to increase by 6.2 million people)¹⁴. Along with the mortality of the population, the health of working citizens, weakened during the pandemic and due to the SMO, which directly affects the qualitative and quantitative characteristics of the labor force, raises concerns.

In direct connection with demographic processes is the problem of the age structure of the able-bodied population. The increase in the retirement age (by 5 years for men and women) is conditioned by the supply of additional labor force. However, the noted focus of the economy on modern trained labor resources reduces the effectiveness of the state reform. In addition to this lack of demand for the human and labor capital of age workers, there is a reluctance of workers themselves to constantly train to continue working (Sizova, Orlova, 2020).

The imposition of sanctions against Russia by Western countries and the start of the SMO played an important role in the development of the shortage of qualified personnel. About 8.2% of all foreign companies left Russia in the wake of the SMO. About 2 million people previously employed by foreign companies (workers in the food and chemical industries, as well as in the automotive industry) lost their jobs. Among the most affected were the automobile and banking industries, trade, communications and telecommunications, and air transportation¹⁵. In this case, programs of state support for business and employment are of great importance. For example, the transfer of Renault assets to the state led to the creation of a fully domestic enterprise (Moskvich), which managed to save jobs for 4,000 employees and pay their wage debts¹⁶.

In addition to direct economic assistance to business, the government implements many social programs to promote employment. These include the development of youth employment, in particular the creation of a market for targeted recruitment of university applicants, the promotion of part-time employment during vocational education, the modernization of the employment service, and the development of internship and apprenticeship programs on online platforms for young people starting from September 1, 2023¹⁷.

In order to reduce the risk of a shortage of qualified personnel, the government has provided entrepreneurs with more than 90 billion rubles to pay salaries and receive subsidies, including benefits for taxes and insurance contributions. A tax rate of 4% (individuals) and 6% (legal entities) is available for the self-employed group; procedures for submitting information on income and transferring tax payments have been simplified. As a result of extensive state support, the number of self-employed increased 1.7 times in 2022 alone and reached 6.5 million people¹⁸. While initially the experiment in the development of self-employment in the country was connected with the need to reduce shadow employment, now the self-employed are often those whom enterprises do not want to employ. A peculiar technology is being actively developed to attract these persons by companies to cooperate as performers under a civil contract¹⁹. For the self-employed there is an opportunity to have a job and an income, and for employers – to reduce expensive costs for in-demand personnel. Currently 56% of Russian companies cooperate with freelancers²⁰. In some areas, such as marketing, retail and construction, freelancers tend to be self-employed. In these

¹⁴ Population of Russia's new territories: Size in 2023. Available at: <https://visasam.ru/emigration/vybor/naselenie-novyh-territorij-rossii.html>

¹⁵ The Center for Strategic Research assessed the consequences of foreign companies' departure for the labor market. Available at: <https://www.rbc.ru/newspaper/2022/06/10/62a0b1cc9a794715859efe59>

¹⁶ Moscow authorities to pay wage debts to employees of former Renault Russia plant. Available at: <https://tass.ru/ekonomika/14651049>

¹⁷ Kotyakov named one of the main reasons for high unemployment in the regions. Available at: <https://ria.ru/20230616/bezrobotitsa-1878864822.html>

¹⁸ Statistics for the national project "Small and medium-sized entrepreneurship and support of individual entrepreneurial initiative". Available at: <https://rmsp.nalog.ru/statistics2.html>

¹⁹ Hiring the self-employed: Risks and benefits for the employer. Available at: <https://odintsovo.hh.ru/article/29607>

²⁰ Pros and cons of the self-employment regime: Survey results. Available at: <https://odintsovo.hh.ru/article/26512>

areas, individuals without special tax status are most often hired as freelancers under civil contracts, as well as sole proprietorships²¹. This may be due to the fact that the performers are specialists in a narrow field, which allows companies to receive high-quality services for the implementation of specific tasks.

Despite the general trend of reduction in the working-age population, Russia still has a low unemployment rate (3.3% in 2023²²). Part of the solution to the problem of unemployment can be attributed to the rapid response of the state to crises occurring in society, the introduction of additional tools to promote employment, offering programs for retraining and advanced training, including for socially vulnerable categories (mothers with pre-school children, persons of pre-retirement age and many others)²³. Thus, the state not only expresses its extreme interest in the development of the labor force, but has recently become a powerful source of its regulation at all levels of economic activity, including in overcoming the shortage of skilled workers.

Finally, it is necessary to pay attention to the problems associated with the progress of digitalization of the economy and automation of production. For enterprises, they constitute significant organizational risks. Progressing in pandemic conditions, they have contributed, on the one hand, to reducing the need of enterprises for a number of employees and, on the other hand, have led to increased demands on those who remain employed in the company. In part, digitalization has promoted the use of remote workforce, which becomes important when it is effectively applied across a vast country. In some cases, an employee working remotely for a company can reside in any region. This allows significant savings on wages if workers are hired from regions with a lower standard of living, as well as solving the problem of shortage of

qualified personnel in certain regions. Self-employed workers or individual entrepreneurs also require less expenditures on the labor fund, since their companies are not responsible for their social and pension security. Working under such conditions is not a positive change for every worker, but against the background of economic turbulence such funds, at least in the short term, can compensate for the deficit.

Demand for skilled labor in Russia and demand for professions in modern conditions

In 2023, the labor market has adapted to the conditions caused by external shocks. However, economic recovery and its further development are hampered not only by technological limitations, but also by the shortage of human resources²⁴. Recently, this topic has been actively discussed at the state level, which indicates that staffing hunger is becoming a national problem. According to hh.ru, in the first quarter of 2023, the number of open vacancies across the country increased by 26%²⁵ compared to last year. As a result, a “job seeker’s market” has emerged, i.e. in many industries and fields of activity, the ratio of vacancies to resumes has changed markedly in favor of those who are looking for a job and want to be employed. Employers must now compete for talented candidates by providing them with better working conditions and a greater choice of development opportunities. Thus, the dynamics in the labor market and the search behavior of job seekers are radically changing.

To determine the shortage of personnel, hh.ru (Russia’s leading online recruitment site) uses a methodology in which the ratio of the number of resumes per vacancy is less than four. This index shows the shortage of specialists through the ratio of the number of active resumes to the number of vacancies

²¹ 68% of Russian companies plan to increase the share of freelance personnel. Available at: <https://delovoyimir.biz/68-rossiyskih-kompaniy-planiruet-uvlichit-dolyu-vneshtatnogo-personala.html>

²² Summary of the labor market situation for May 2023. Available at: <https://hhcdn.ru/icms/10286635.pdf>

²³ Promotion of employment. Available at: <https://programs.gov.ru/Portal/programs/passport/07>

²⁴ What the trends tell us. Macroeconomics and Markets: Bulletin of the Research and Forecasting Department. Available at: https://cbr.ru/Collection/Collection/File/43700/bulletin_23-01.pdf

²⁵ The number of vacancies in Russia increased by 26%. Available at: <https://www.forbes.ru/svoi-biznes/488420-cislo-vakansij-v-rossii-vyroslo-na-26>

and takes into account all groups of workers by professional fields²⁶. A condition where there are between 4 and 7.9 resumes per vacancy is considered normal. If the number of resumes per vacancy is greater than 7.9, this situation indicates an oversupply of labor in the labor market²⁷. Thus, according to the reports of the website hh.ru, the index of the ratio of active resumes to vacancies in Russia in May 2023 was 3.6 (at the beginning of the year 4.5), which indicates that the labor market belongs to the job seeker or a serious risk of a labor shortage 4.5²⁸. At the same time, the regulator hh.ru characterizes the general dynamics of the labor market as follows: the decline in the number of job seekers in the first quarter of 2023 can presumably be attributed to the reduction in the number of “white-collar workers” and their transition to the status of sole proprietorships or self-employed, as well as relocation. A further decline was projected for the period June – August 2023, as the summer months traditionally record low levels of labor market activity²⁹.

In Russia as a whole, demand for workers increased by 13%³⁰ at the beginning of the year. The growth in the number of vacancies is associated with the development of industry and the launch of new products on the market. The Far Eastern, North Caucasus, Ural and Volga federal districts are experiencing the greatest staffing hunger. Thus, the number of vacancies has significantly increased in the Far Eastern Federal District (by 17% in the first month of the year)³¹. This is explained by the demand for workers due to the opening of new enterprises and the development of the construction sector. In May 2023, there is a

decrease in the activity of job seekers and an increase in vacancies in the North Caucasus region. The need for qualified labor force is due to changes in the economic sphere and transition to new supply chains, development of sales markets. The Volga Federal District felt the staffing hunger, where the demand for skilled labor for the manufacturing industry increased³². In May 2023, record low hh.ru index values were recorded in the Ural and Central federal districts (2.8 and 2.7). The shortage of skilled workers in the Ural is explained by the development of import-substituting industries, the increase in the state defense order, as well as the mobilization of employees from civilian enterprises. The Central Federal District is experiencing a shortage of skilled labor due to many of the above reasons (demographic problems, relocation, mobilization of qualified employees, etc.).

The key problem faced by many sectors of the economy is the shortage of skilled labor, as indirectly evidenced by the record low unemployment rate of 3.3% in April 2023³³. Partial mobilization has exacerbated the situation. Surveys by the Gaidar Institute recorded a significant shortage of qualified personnel in industry in the amount of 35%³⁴ of the total number of surveyed enterprises (about 1,000 enterprises participated in the survey). The most acute shortage is felt in the light industry. In addition, there is a problem of heterogeneity of demand for labor force among employers. The most demanded groups of qualified workers are “blue-collar”, i.e. representatives of labor and production professions. 16% of vacancies are open for the representatives of “white-collar” professions –

²⁶ Hh index. Available at: <https://hh.ru/article/index>

²⁷ Faster, better, more accurate: How changes in the hh.ru catalog affected labor market analytics. Available at: <https://odintsovo.hh.ru/article/31451>

²⁸ Summary of the labor market situation for January 2023. Available at: <https://hhcdn.ru/icms/10278941.pdf>

²⁹ Summary of the labor market situation for February 2023. Available at: <https://hhcdn.ru/icms/10286635.pdf>

³⁰ Summary of the labor market situation for February 2023. Available at: <https://hhcdn.ru/icms/10280283.pdf>

³¹ Ibidem.

³² The main trends in the labor market, reduction of informal employment and reduction of wage arrears were discussed at a meeting with the regions of the Volga Federal District. Available at: https://nagorskadm.gosuslugi.ru/dlya-zhiteley/novosti-i-reportazhi/novosti-193_935.html

³³ Summary of the labor market situation for May 2023. Available at: <https://hhcdn.ru/icms/10286635.pdf>

³⁴ 35% of industrial enterprises in Russia are experiencing staff shortages. Available at: <https://www.iep.ru/ru/kommentarii/sergey-tsukhlo-35-promyshlennykh-predpriyatiy-v-rossii-ispytyvayut-defitsit-kadrov.html>

financiers, lawyers, marketers, etc., 10% for the representatives of IT professions³⁵.

According to hh.ru from January to May 2023, the acute shortage of qualified personnel is observed in the automotive industry, medicine and pharmaceuticals (the index decreased to 1.9)³⁶. The automotive industry suffered the most against the backdrop of sanctions, now it is slowly recovering. Many workers in this sector have left for other professional areas due to the closure of enterprises and production facilities. Initial expectations that these skilled workers would enter the labor market did not come true: they were instantly employed in other spheres. The main reasons for the shortage of medical staff are the reduction of incentive allowances and the abolition of COVID allowances, the planned optimization of medical workers in state institutions.

As for the labor force, construction, tourism and mining³⁷, the previous acute shortage of workers in these areas has decreased, but applicants are still in demand.

It is currently expected that the shortage of highly qualified personnel may worsen due to the introduction of a tax on employees working for the Russian economy and having the status of IE or self-employed, but residing abroad (increase in the personal income tax rate to 30%)³⁸. It can also be assumed that the deficit may increase in the military sector against the background of the SMO, as the need for highly qualified specialists with a narrow focus increases over time. Thus, in the labor market in 2023 against the background of low activity of job seekers, associated not so much with political and demographic reasons, but primarily with external shocks, with the problems of training the necessary specialists and technological backwardness of the country, there is a growing shortage of personnel, primarily skilled workers. In addition to solving the above-mentioned social and economic problems, overcoming it in the future may require a change in the

trajectory of staff selection by employers. It should include attracting older employees, interaction of enterprises with remote workers, self-employed, students, development of the mentoring system and corporate training.

Conclusion

Labor resources are the leading driver of the economy and sustainable development in the modern world. At the same time, it is skilled workers who represent the backbone of the economy and society today. Such resources include personnel with the knowledge, skills and experience necessary to create and develop new products and services in the context of technological sovereignty and digital society. Thanks to their talents and skills, highly qualified personnel are considered an asset for any enterprise in their quest for efficiency and competitiveness. Specialists from different profiles and disciplines can make a significant contribution to sustainable development through innovation, creative thinking and high productivity. Therefore, investing in human resources is a key factor determining the success and development of a modern enterprise.

The highest priority is given to personnel who are able to work in the conditions of modern technology development. Russia, which has proclaimed a policy of technological sovereignty, should strive to maximize the use and development of workers' competencies. Since technologies are changing very quickly and the country is facing serious challenges, the government and companies should actively engage in creating an infrastructure to help workers acquire the necessary skills, knowledge and experience and adapt to new living conditions.

The serious shortage of qualified personnel in the current situation in Russia is due to many critical factors. In addition to demographic problems and the decline in the number of able-

³⁵ The labor market today and what every HR specialist and top manager should know about it. Available at: <https://odintsovo.hh.ru/article/31520>

³⁶ Summary of the labor market situation for May 2023. Available at: <https://hhcdn.ru/icms/10286635.pdf>

³⁷ Summary of the labor market situation for May 2023. Available at: <https://hhcdn.ru/icms/10286635.pdf>

³⁸ At the moment the bill has not been adopted and is under consideration in the State Duma ("On Amending Parts One and Two of the Tax Code of the Russian Federation and Certain Legislative Acts of the Russian Federation") Available at: <https://sozd.duma.gov.ru/bill/369931-8>

bodied population, there is an acute shortage of young specialists. Qualified personnel are being washed out of the economy due to the SMO and partial mobilization. However, the key factor is the inefficient system of vocational education in the country, which is unable to adequately respond to the needs of the labor market and therefore requires radical modernization.

An important aspect of the modern labor market is the development of workers' competencies, i.e. the maximum utilization of the country's labor resource based on the development of modern solutions, improvement of interaction between the state/regions, business, education system and workers themselves. In

modern economy not only demanded and diverse knowledge and skills are important, but also readiness for their constant updating. Employees should be ready for constant training and improvement of their knowledge and experience. A modern employee is an active and cognitive subject, involved in the development and application of new technologies, adapting in a situation of permanent changes in work requirements, able to work in a team, in conditions of multitasking and creative decision-making. In this sense, a new philosophy of work is emerging, and all stakeholders must comply with it: companies, government structures, educational institutions, family and civil society.

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INFORMATION ABOUT THE AUTHORS

Irina L. Sizova – Doctor of Sciences (Sociology), Professor, St. Petersburg State University (1/3, Smolny Street, Saint Petersburg, Russian Federation, 191124; e-mail: sizovai@mail.ru)

Elena D. Elagina – Research Engineer, St. Petersburg State University (1/3, Smolny Street, Saint Petersburg, Russian Federation, 191124; e-mail: st098982@student.spbu.ru)

Natalia S. Orlova – Post-Graduate Student, St. Petersburg State University (1/3, Smolny Street, Saint Petersburg, Russian Federation, 191124; e-mail: orloka135t@mail.ru)