

SCTMG 2023
International Scientific Conference «Social and Cultural Transformations in the Context of
Modern Globalism»

ANALYSIS OF CURRENT LABOR MARKET TRENDS AND
BARRIERS

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Abstract

The article considers various trends that act as imperatives for the formation of human capital at present in Russia. The analysis notes the correlation of economic crises formed by foreign agents, the processes of digitalization, automation and disproportions in the system of interaction between higher education agents and organizations. This trend arises due to a number of risks shifted between agents, the acquisition of more social functions by educational diplomas and their substitution of its direct meaning. This involves the emerging additional responsibilities of teaching staff, the lack of common standards of educational programs, teaching and methodological complexes of disciplines among educational institutions with the same approved set of specialties. The focus on relevance in the educational sphere leads to the opposite results: the necessary specialists are no longer in demand by the time of graduation, which indicates the need for convergence between the state, educational institutions, students and final agents, i.e. organizations that need competent specialists. The data obtained in the course of the analysis report about the imminent growth of demand for highly qualified specialists with all the competencies necessary to perform professional duties, the decline of low-skilled labor, and a significant change in the composition of in-demand specialists by 2030. A significant role in the emergence of imperatives for the formation of an effective labor force is played by historically formed patterns that describe in detail the general image of Russian entrants, students, education workers and directly the employee already performing their professional functions.

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Keywords: Automation, digitalization, educational system, economic trends, imperatives of formation, market trends

1. Introduction

The current global economic paradigm forms qualitatively new tasks to ensure competitiveness and growth of Russia's welfare in the aspect of modernization of economic processes in the direction of transition to the knowledge economy. The restructuring of the Russian economy should be based on a systematic departure from the model of redistribution of rent from the sale of goods of the mineral and raw materials complex towards the formation of a new model based on the development of innovative knowledge-intensive industries, the flagship driving force of which is a highly developed human capital (Mele, 2022; Nikulin, 2023; Rawel, 2022).

2. Problem Statement

The escalation of the role of a person as a key component of active economic growth is conditioned by a set of external macroeconomic demands on the part of the market environment, combined into two key fundamental trends determining the restructuring of the labor market.

- i. The first trend, most clearly manifested since 2024, is characterized by the actualization of a number of economic risks and uncertainty caused by the crisis of external globalism and anti-Russian economic restrictions moderated by foreign agents, demand markets and sources of production and financial resources (Okhotsky, 2016). In conjunction with the fall in world energy prices, these phenomena provoked the development of a large-scale structural crisis and disproportions in the economy of the country, the consequences of which were the weakening of the national currency, falling income levels of the population and the country as a whole, the aggravation of social instability, which ultimately led to a significant decline in effective demand.

Together, these factors forced the restructuring of the business model of almost all commercial organizations in the country, transforming their business processes from those aimed at the previously relevant paradigm of extensive growth to a new, deterministic goal of survival on the basis of competition for consumers against the background of reduced demand. This includes a reduction of all groups of costs, introduction of resource-saving technologies, a transition to conservative models of financing as part of the provision of operating activities based on short-term tactical planning (Collet-Sabé, 2023; Manakbayeva, 2023; Sheveleva, 2024).

Due to market fluctuations, there was a significant decline in business activity in the country, as shown in Figure 01, accompanied by a deterioration in business and consumer sentiment.

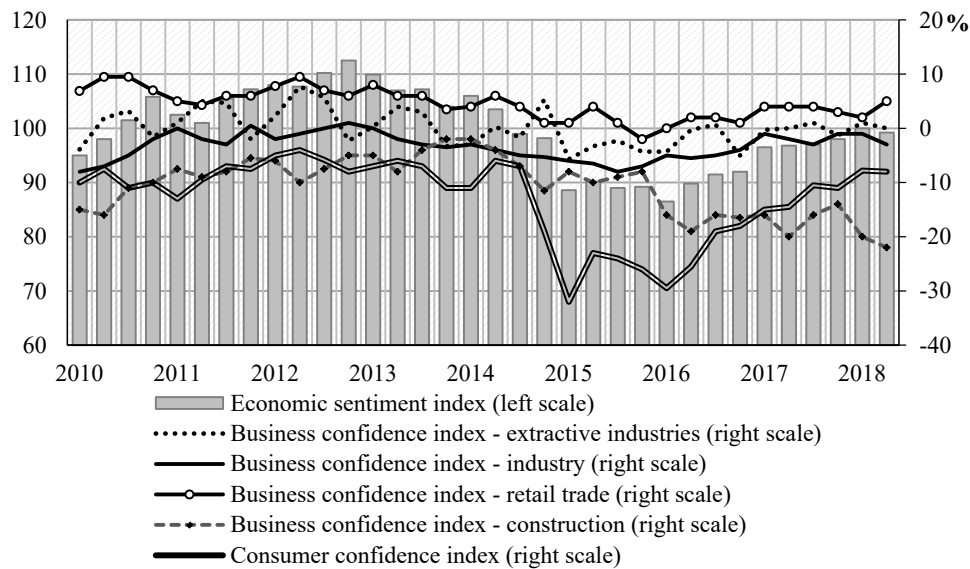


Figure 1. Dynamics of indices of economic sentiment (Andreeva, 2022), entrepreneurial (Consumer expectations in Russia) and consumer confidence

As a result of the global contraction of the economy, the labor market has undergone a number of restructuring: in connection with the optimization of personnel costs, organizations have chosen the course of salary cuts, partial elimination of jobs, a transition to a shorter working week, and reduction of corporate social programs. As a result, there is a sharp expansion of the informal employment sector, which represents less technological, non-capital-intensive spheres, usually not requiring special competencies, such as trade, construction, service. In this regard, previously acquired professional competencies are replaced and degraded, reducing the quality of human capital.

However, as can be seen from Figure 1, starting from the third quarter of 2016, the positive trend of business activity growth and the general transition to the phase of recovery growth have been consolidated in the economy. According to the data of the Center for Conjunctural Research of the Institute of Economic Research of the National Research University, Higher School of Economics, starting from 2018, the Economic Sentiment Index corresponds to the I phase of growth acceleration for the first time since 2014 (see Figure 02).

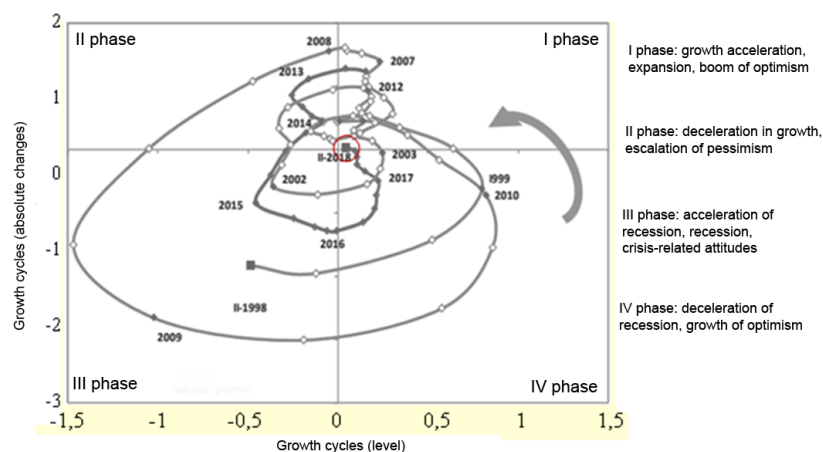


Figure 2. Tracer of cyclicity of the Economic Sentiment Index (Dzhemayev & Andreeva, 2019)

Therefore, at the moment, there is a tendency of reverse transformation of the economy in the direction of recovery of the initial volumes of activity, which in conjunction with the low base effect caused by the consequences of the imposed anti-Russian economic restrictions, in the near future will give impetus to the natural growth of demand for highly qualified specialists. This, on the one hand, is caused by the restructuring of the economy and transformation of business processes and, on the other hand, by the increase in business activity, in connection with which it is also predicted that the demand for highly qualified specialists will grow

In accordance with the policy of import substitution and ensuring the country's economic security, the Russian Government has chosen the vector of industrial development and achievement of sustainable growth in domestic production. Therefore, the greatest emphasis as a driver of economic recovery growth is placed on the industrial sector. At the moment, according to the survey of the Industrial Development Monitoring Center, 87% of industrial enterprises in the country are facing a shortage of qualified personnel. The key reserve for the development of industry, allowing achieving sustainable growth rates of 3.5–4.0%, contributing to the further long-term competitiveness of the Russian industry, is seen as the increase in labor productivity, overcoming the shortage of mainly highly qualified labor force.

2. The second fundamental trend is related to the restructuring of many sectors of the economy in the direction of digitalization, automation and the strengthening of the role of information technology in most industries. At present, business processes are being reorganized and modified in order to integrate IT infrastructure into them, which makes it possible to increase the speed of business operations, build new information channels, and simplify procedures for the introduction and development of new products. The role of information as a key resource for decision-making is increasing, which is why tools for processing and analyzing significant arrays of structured and unstructured data based on industrial analytics systems are being introduced.

In the next 10–15 years, a significant leap is expected in the industry due to the introduction of the industrial Internet of Things and M2M-technologies (Gusenko, 2021). Digital technologies in many respects already regulate the construction of qualitatively different standards of remote interaction of business agents. There is an increase in automation and robotization of a number of technological operations. According to experts, this will lead to a restructuring of the labor market structure and change the type of employment of individual specialists (Piscini et al., 2016).

The potential of blockchain technologies as a tool for securing the transmission and access to information is highly appreciated, which may also affect the restructuring of the business model in the organization of transactions.

Due to the increasing level of automation, openness and customer-orientedness, the financial sector is undergoing a radical change. The leaders of the segment are striving to create an infrastructure that provides the client with opportunities to perform the majority of financial transactions using a mobile device, flexible customization of services, personal financial management, biometricization of payments and social payments (T. V. Ignatova & Vasiliev, 2013).

3. Research Questions

Global processes of "digit-alization" play the role of a catalyst in the aspect of transition to the knowledge economy, changing the priorities of demand for factors of production. The paradigm, in which human consciousness becomes a priority resource capable of creating innovative technologies and solutions that generate significant income, is actualized. Professor O. Ignatova (2019) notes: "As the role of human capital in society increases, labor productivity increases and contributes to the modernization of production" (p. 47). The development of the digital economy and new technologies will contribute to the emergence of new sectors, companies and jobs, as well as the disappearance of professions associated with low-skilled labor. In this regard, in employment sectors characterized by low-skilled labor, there will be an increase in competition for jobs (Butenko et al., 2019a). Also in high-tech industries in the near future, the very nature of competition may change due to the entry into the labor market of young workers of generation "Z", who have a more developed pool of digital competencies since birth. As a result of accelerated development and integration of technologies into production, the processes of obsolescence of the experience of the older generation are accelerated, so that it loses its relevance for the newer generation, actualizing the tasks of forming the base of competent specialists "from scratch" (Frey et al., 2016).

According to a study by scientists C. Frey and M. Osborn, conducted jointly with Citibank in 2016, as a result of digitalization of processes in the United States, jobs will be replaced in 47% of existing professions, on average in OECD countries in 57% and in China in 77% of professions. And WEF experts, based on the results of the analysis of the labor structure in 15 developed and developing countries, concluded that 7.1 million jobs will disappear by 2020 as a result of digitalization of the economy (Atlas of new professions). The "Atlas of new professions" is a joint project of Moscow School of Management "Skolkovo" and ASI. It predicts the disappearance of 57 "traditional" professions and the emergence of 186 new ones by 2030 in Russia. This, in turn, forces the development of the trend of "extra people" in the labor market who are unemployed and whose basic level of education does not allow them to adapt to the changes and complexity of new professions.

4. Purpose of the Study

New economic and technological trends are reshaping the structure of the labor market, changing the nature of competition for leading specialists in industries and leading to a significant overall increase in the complexity of professions, resulting in higher requirements for the qualifications and competencies of employees. In the struggle for leading competitive technological positions, the most urgent opportunity for Russia is to build up and utilize its high potential in the sphere of human capital.

The development of advanced professional and managerial competencies, as well as the effective accumulation and application of knowledge, is already becoming a priority for the spread of strategies of innovative development of activities focused on long-term growth. This allows overcoming structural imbalances through the integration of Russian companies into the most knowledge-intensive global value chains with the subsequent strengthening of positions in high-tech niche markets, the entry into new

international markets, overcoming the effect of the "innovation gap" in the global economy and the impact of the global economic crisis.

On the way to the formation of a high-tech national economy based not on the absorption of natural resources, but on the effective development and application of human capital, there are a number of critical barriers, the overcoming of which is seen as a key problem requiring active initiatives on the part of all participants in economic relations.

5. Research Methods

The lack of critical demand from the economy for highly qualified specialists. Despite the ongoing processes of digitalization of the economy and reorientation of activities in the direction of science-intensive high-tech industries, the Russian industry structure still retains a predominantly raw materials-based nature. And in the international division of labor, Russia is a supplier of mineral resources and their primary derivatives. Hence, according to the Federal Customs Service of the Russian Federation for 2019, 63.5% of the export structure consists of mining products and another 10.4% of metal processing products. High-tech exports from the total volume are represented only by 6.0% by machinery, equipment and 2.3% by knowledge-intensive products of the chemical industry and pharmaceuticals. At the same time, machine building accounts for 45.6% in the structure of imports (Figure 03).

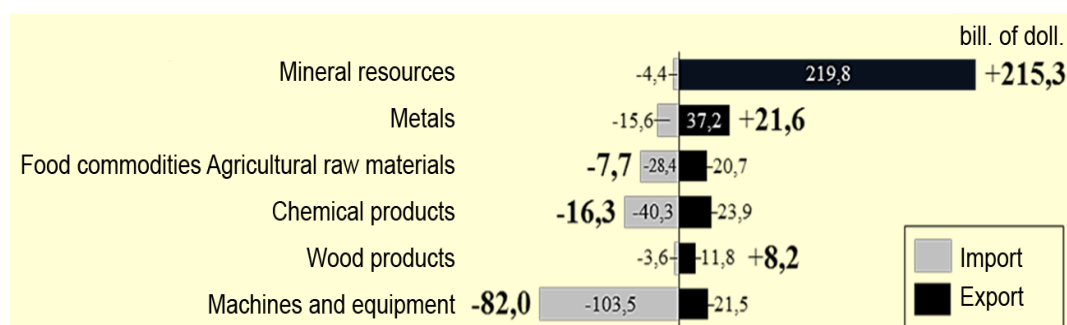


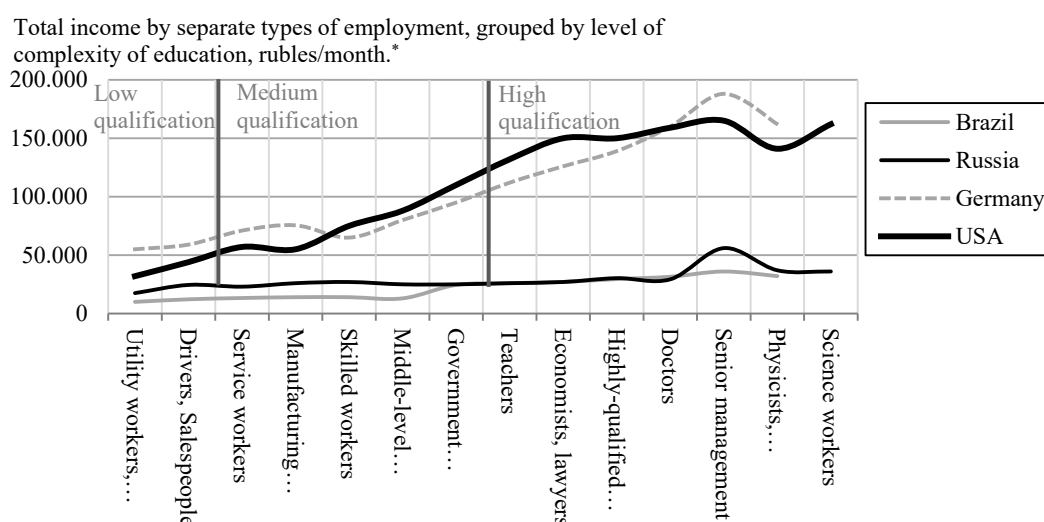
Figure 3. Structure of Russia's foreign trade, 2019

The raw material structure of the economy determines the parameters of demand for labor resources, contributing to the spread of a primitive type of employment characterized by low-skilled labor. Half of the total volume of employment in the country is formed by 28 professions out of 450, among which the most popular are drivers (7.1%), sales representatives (6.8%), loaders and utility workers (2.4%), cleaners (2.1%), security guards (1.8%). In comparison, representatives of knowledge-intensive industries, which include natural science and engineering professions, programmers, account for a total of 5.1% of employment (Cahuc, 2024).

At the same time, there is a general tendency of negative reproduction of jobs in the economy. According to one of the leading European economists, P. Kahuk, in efficient economies 15% of jobs should be created annually, of which 1/3 should be created by newly created companies, 2/3 by existing ones. At the same time, liquidation rates should be comparably lower (Labor resources, employment and unemployment). However, according to the results of the survey at the beginning of 2018 in Russia, 6.6% of jobs are created and 6.7% are liquidated (Gimpelson, 2016), which indicates a general contraction of

the labor market. At the same time, there is still a high turnover of the labor force, caused not by the generation of new employment, but by artificial employee flows between organizations. As noted by Professor V.E. Gimpelson of the National Research University, Higher School of Economics, such excessive reshuffles, which are not accompanied by the creation of new jobs, lead to "the loss of specific firm and sectoral human capital", which discourages organizations from investing in its further development (Butenko et al., 2019b).

The current economic environment does not sufficiently incentivize the prioritization of human capital development among the population. Currently, the wage spread between low-skilled labor (cab driver) and high-skilled labor (doctor) is 20%. This significantly limits the motivation to choose complex professions. At the same time, in Brazil this difference is 172%, in Germany it is 174%, in the USA it is 261%, which is a direct signal from the market about the demand for skilled labor (see Figure 04).



* Note. Labor remuneration is recalculated at purchasing power parity, net of income tax.

Figure 4. Distribution of income in the context of individual types of employment (Kanaeva, 2022)

At present, the majority of employment in the country is provided by large organizations with state participation, and due to the historical peculiarities of the country's development, the state has assumed the role of a guarantor of stability and overall employment. It prioritizes social and political objectives over economic efficiency, which is reflected in the prioritization of wage cuts during recessions over the reduction of inefficient jobs (unlike in developed economies).

These factors are additionally accompanied by stagnation in the digital sectors of the economy after the boom of the 2010s (growth of 2.8% in 2019), which is due to the underdevelopment of the venture capital market, limited access to investment resources, and the lack of elaboration of regulatory measures for this market by the state. In particular, we mean the introduction of the so-called "Google tax", which imposes VAT on digital services provided by foreign agents. At the same time, the mechanisms for promoting the goods of the domestic IT market are based on the use of foreign services, the price of which has increased dramatically. As a result, a significant part of IT-companies cooperating with foreign contractors moved under the jurisdiction of other countries.

The final result of these trends is a significant outflow of highly qualified labor force (mainly in information and technological profiles) abroad, which is aggravated by the limited capacity of the educational system to promptly reproduce the required volume of specialists needed by the economy.

Presence of structural disproportions in the system of interaction between higher education entities and organizations. Due to the growing need to provide the market with qualified specialists in multiple industries, the role and importance of the higher education system as a mechanism for the training and development of competent young professionals capable of creating a platform for economic growth are escalating. However, the current modernization and the state of the educational market have signs of non-organicity due to the catch-up nature of its transformations, responding to changes in the economic paradigm with significant time lags (Mau, 2016). A massive educational system with significant inertia is not able to adjust promptly to changing environmental conditions. Hence, at present universities, in order to minimize endogenous risks, mostly choose the way of planning future demand for professional competencies, guided by current market signals and needs. This eventually leads to the emergence in the modern market of specialists in professions that were in demand 4-6 years ago, in connection with which there are negative effects of strengthening labor market imbalances, leading to the aggravation of structural unemployment. As a result, organizations make a demand for specialists with higher qualifications, but the market is unable to satisfy it due to outdated knowledge or mismatch of qualification characteristics with an oversupply of specialists of certain professions (Davydova, 2022).

There is a general weakening of the role of higher education as an element of the system of training competent specialists, and the most significant reason for this phenomenon is the weak interaction between universities and organizations in the issues of strategic planning and training of future personnel. This in conjunction with other coherent factors leads to the dispersion of resources invested in the training of future specialists, the strengthening of imbalances in the labor market, discrediting and inflation of education in general. This is ultimately reflected in the form of helplessness of the economy in the implementation of innovation breakthroughs and non-competitiveness of industries in the struggle for leading positions in the world market. In our opinion, this reason is based on the unsynchronization and lack of closure of vectors of requests and responsibilities between the three main groups of agents of relations within the educational process.

An exceptional peculiarity of the higher education (HE) system functioning is the fact that HEIs act simultaneously as participants of the labor market and the market of educational services, causing the divergence of their role in two directions due to the separation of recipients of educational services. Clients are represented by the population and consumers are represented by economic entities. In connection with the weakened connection between universities and the real sector of the economy, the relationship between the university and the client dominates. This fact leads to a system of dysfunctional requests and responsibilities that do not correspond to the general economic and social vector of development of human resources potential of the country and distort the final result of educational processes (Dzhemayev et al., 2022).

Due to the weak cooperation between universities and organizations in the implementation of educational processes, for a considerable period of time, the labor market has developed a paradigm of general distrust in the quality of higher education and state diplomas confirming it. In this connection, the

employers' priority request to applicants is the availability of work experience in the target specialty as a confirmation of the necessary qualifications. This puts young professionals in a non-competitive position in employment. Therefore, for job seekers the fact of employment becomes the highest priority, in connection with which the employer gets the freedom to manipulate wage rates and the quality of working conditions. However, according to the theory of M. Spence, due to information asymmetry in the labor market, the requirement for higher education remains nominal. And the diploma acts as a signal of the necessary minimum level of training of the candidate, which eventually turns higher education into a social norm rather than a real tool in the formation and development of professional competencies. Hence, according to the National Research University, Higher School of Economics, 26.5% of those employed in the economy in the context of their current positions do not require higher education for the implementation of labor functions.

At the same time, universities are ready to satisfy this demand on condition of its solvency, significantly weakening the incoming and current control requirements for students in order to actively attract and further retain them. As a result, a dysfunctional model of relations is formed, characterized by the accumulation of specific risks for each group of agents. This, in conjunction with their desire to transfer these risks to other participants of relations, leads to the generation of global systemic risks of educational activity, negatively affecting the development of the economy. Let us analyze these systemic risks.

Strategic risks. Due to the detachment of the educational system from the needs of the real sector, the general orientation of its development does not always correlate with general economic trends. And therefore, the finished product (young specialist) is not always able to quickly integrate into the processes of value creation, which generates significant transaction costs during the transition from a student to an employee. Depending on the ratio of supply and demand in the labor market, these costs are covered either at the expense of organizations or at the expense of applicants themselves, which ultimately reduces the effectiveness of their interaction and negatively affects the economy.

Management risks. They are produced as a result of measures and normative requirements from the state to universities within the framework of the educational reform. They are aimed at regulating and coordinating educational processes, as a reaction to the limited formation of effective mechanisms for training qualified specialists due to the lack of close interaction with the real sector.

In order to successfully pass accreditation, HEIs reorganize the processes of providing educational services to meet the described regulatory requirements, paying less attention to the quality of education. A significant amount of bureaucratic work falls to the teaching staff, significantly limiting their ability to effectively prepare educational material (Kanaeva, 2022).

Market risks. They are conditioned by the prioritization of competitive and commercial incentives, competition for contingent and financial resources. This leads to the transformation of the model of higher education institutions' activity towards the principles of economic efficiency and profitability and creates prerequisites for following the demand from customers. That, in particular, led to an excessive number of trained economists in the 90s and 2000s, exceeding the real needs of the market. E.V. Bodrova notes: "the market approach in the system of higher education in any of the European countries of the world has not justified itself". She points out that in Austria, Germany, Italy the ratio of budget and

commercial bases is 90 to 10%, Great Britain, Finland it is 80 to 20%, Sweden, Denmark it is 70 to 30% (Bodrova & Nikitina, 2020). In Russia, the ratio is 50/50% (Education in 2019).

Client risks. This type of risks arises due to the weakening and imperfection of control tools for assessing the abilities and competence level of both applicants and students. In order to increase the availability of the most economically profitable specialties, universities are guided by the minimum acceptable criteria of USE-exams for entrants, without taking into account the parameters of career guidance and professional suitability. Further, Figure 5 shows the number of entrants to the Faculty of Economics on a commercial basis in FSBEU VO RGUPS in 2014 in terms of total entrance scores. As can be seen from the figure, the selection was made without a competitive basis based on minimum entrance scores on the USE (99 points in the corresponding year). As a result, the weighted average score of applicants amounted to 159, which is relevant to the assessment of "satisfactory".

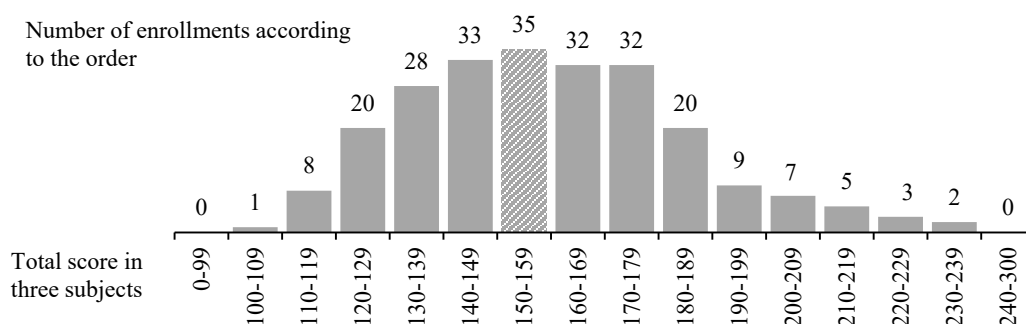


Figure 5. Contingent of enrollment on a commercial basis

A low average level of ability and motivation among the contingent of students in conjunction with the avoidance of measures to expel students with low performance leads to a decline in the quality of education. Teachers are forced to resort to simplification of the material or accept the fact that a significant proportion of students will not be able to learn it. As a result, the graduation results of such students discredit the quality of higher education.

Risks for employers. Due to the lack of educational interaction between universities and organizations, there is an information imbalance that generates significant costs for employers when building organizational processes of search, recruitment and assessment of applicants. The main share of non-transparency is caused by the irrational division of labor in student assessment: it is inadequate to fully entrust the assessment of the quality of service provision to the agents directly performing it. It is obvious that there is a conflict of interest, which can be aggravated by teaching subjectivism, formality in the application of assessment tools, and corruption.

Instrumental risks. Due to the lack of unified educational-methodical complexes and control and measurement tools tested by the market as elements of educational production, the responsibility for their development falls to the teaching staff of each higher education institution on an individual basis. This creates a foundation for subjective author's interpretations of the content of educational programs, teaching on the basis of outdated irrelevant or compiled material, lack of a common vision of the final result. It is also an additional load for teachers, which, as a rule, is not stimulated.

Social risks. They are connected with the distortion of the role of higher education institutions as institutions of formation and development of the country's social human capital. In this case, on the one hand, the role of higher education is substituted. In this connection, it is transformed into a form of obligatory social norm (often formal) or a way to evade military duty, and on the other hand, social inequality grows due to the disproportions in the availability of higher education within the territorial and financial aspects.

Weak socio-cultural orientation to competence growth and development. A certain share of the nature of manifestations of intensity and direction of initiatives to develop their own human capital on the part of the population can also be explained by the features of stable behavioral and psychological profiles, cultural and social traits, which are combined in the category of "mentality".

Specialists and experts of the BCG consulting company, as a result of a survey of a significant number of company managers, have identified certain behavioral patterns of the "average" Russian employee (Butenko et al., 2019c):

- i. deficit of initiative, negative fatalism, avoidance of responsibility;
- ii. process-oriented rather than outcome-oriented;
- iii. excessive conservatism, fear of the new, reliance on established, sometimes ineffective rules, concepts, procedures;
- iv. low adaptability and flexibility;
- v. low customer focus, associated with the desire to meet the needs of the internal customer – the manager;

mechanicity of labor actions, inactivity in the performance of professional functions.

6. Findings

A detailed analysis of this problem reveals multiple preconditions for these negative characteristics in the socio-cultural profile of the country. Based on the results of G. Hofstede's research, some specific parameters of the Russian social and cultural way of thinking and behavior were identified (Figure 06).

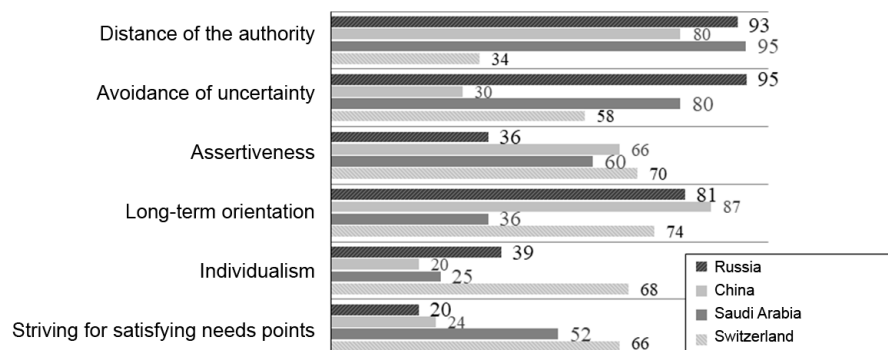


Figure 6. Comparative characterization of socio-cultural profiles of countries according to G. Hofstede's typology

As one of the key negative characteristic features of the profile of Russia, it is worth noting the high desire of the population to avoid uncertainty (95 points). This is due to the national need for security and stability as a reaction to multiple crisis trends in society and economy, the total duration of which, as O.V. Andreeva notes, since the 1990s has been longer than the periods of favorable conditions (Andreeva, 2024). The struggle for survival determines the general desire for security to the detriment of self-expression and self-realization. We also note a high indicator of power distance (93 points), which indicates the perception of social relations formed in the consciousness of the population as based on inequality. In this case, the authority of power is perceived as uncompromising and, as a result, passive behavior on the part of employees who do not have power in the organization, fear of leadership, sometimes bordering on destructive aspirations of avoiding (hiding) failures and mistakes. Power itself is perceived not as a management tool, but as a value and social good. According to these criteria, the Russian type of culture corresponds more to the Asian than to the European one. In conjunction with low rates of assertiveness, individualism and tolerant attitude to their own unsatisfied needs, which is explained by the legacy of the Soviet paradigm of social values, the image of the employee is formed. It is oriented towards maintaining the current stable employment status as opposed to the prospects for the development of individual human capital with its subsequent realization in more complex but better paid professional fields.

This characteristic is confirmed by the results of the study by R. Inglehart and K. Welzel, who classify the Russian socio-cultural type as a secular-rationalist, oriented towards survival as opposed to self-expression (Inglehart & Welzel, 2005).

The described picture of the socio-cultural profile of Russian employees, in our opinion, dictates certain rules and requirements to the organization of the labor process in order to offset negative effects. The necessity of setting clear goals for employees with transparent criteria for their achievement and motivation system is of topical importance. Through moderate decentralization of power and distribution of responsibility zones, it is possible to increase the level of initiative. And the solution of actual professional tasks should orient personnel to search for new knowledge and development of their competence potential. At the same time, the labor process of employees should be partially associated with positive stressors stimulating them to leave their comfort zones and make increasing efforts, acting as drivers for the development of professional competencies.

7. Conclusion

Therefore, the considered actual fundamental economic trends and barriers of the labor market determine the need to build systems of corporate human capital development that meet the key demands and challenges of the macro environment. Let us formulate the leading directions of prospective managerial tasks to be solved within the framework of the system approach of human capital development of large organizations.

- i. The largest corporate market structures, being the flagships of the Russian economy and providing the largest volume of labor employment, must quickly adapt to changing global economic, technological and demographic conditions. Expanding demand for the most qualified specialists in various industries, competition for unique advanced competencies,

total digitalization of the economy and aspects of everyday life of consumers can be initiated. These involve an integration of information technologies into business processes in conjunction with the emergence of innovative products, sciences and industries dictating a high priority of forming internal tools for development and building human resources potential, since it is through on-the-job training that organization-specific skills can be created.

- ii. To minimize endogenous risks generated by external market agents, the system approach should provide for an introduction of complex tools for comprehensive assessment and certification of employees at the time of recruitment within the framework of employment, using assessment tools and systematic monitoring of changes in the level of competence. Under the conditions of market, organizations should be more focused on the availability of real skills, knowledge and experience, hence be able to conduct procedures for their valid diagnostics. There must an introduction of effective tools for adaptation and knowledge transfer to reduce barriers to hiring young specialists and their subsequent effective integration into the working environment.
- iii. The personnel development system should provide for motivation tools oriented, on the one hand, to increase the efficiency of labor functions performance and, on the other hand, to stimulate employees to develop their potential and form challenges to self-improvement as the main way of solving actualized and permanently complicated professional tasks.
- iv. The training and retraining of personnel is associated with the risk of losing investments in human capital in the event of employee dismissal. In this case there is a "vicious circle": a high level of mobility prevents investment in training, the lack of which pushes up turnover and decreases loyalty on the part of employees. Hence, in order to retain the most important employees with key knowledge and competencies, it is advisable to develop and integrate employee loyalty management tools when building a human capital development management system.

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