



Old age individuals on the Russian labor market: challenges and opportunities

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Abstract

The relevance of the research topic is due to the following circumstances: firstly, repeating the European trend, the labor supply in the Russian labor market is characterized by increase in the cohort of people aged 60 years and older, which negatively affects the indicators of economic growth and, in the context of the transformation of labor legislation, strengthens the scientific interest in the problem of aging employees and prolonging their working capacity;

secondly, in modern foreign and Russian studies there is no uniform idea of the signs of classifying workers as older working age, which makes it difficult to conduct a comparative analysis and disseminate effective international experience to solve the employment problem, taking into account demographic realities;

thirdly, in the theory and practice of labor economics there is no well-formed idea of a system of factors that influence the success of older working age workers, which affects the quality of the development of promising areas and methods of their use;

fourthly, when the risk factor in the work with personnel is indicated in the profile economic literature, its assessment regarding employees of older able-bodied growth has not been developed;

fifthly, in modern studies there is no effective mechanism to increase the success of older working age workers, taking into account the specifics of achieving the effectiveness of their work, taking into account competence, involvement and possible risks.

The purpose of the study is to develop theoretical concepts and methodological provisions on the professional success of older workers and the mechanism for its increase in the Russian labour market, taking into account risk factors.

The subject of the study is the social and labor relations evolving over the implementation of a mechanism to increase the success of older working age workers.

In the research process, general scientific methods of cognition were used, as well as methods of economic-statistical, systemic correlation analysis, expert estimation, the results of opinion polls, tabular and graphical interpretation of empirical and factual information.

Keywords: *labor market, third-age individuals, socio-economic relations, labor potential.*

The working hypothesis of the study is to substantiate the scientific assumption that older workers are a special segment of the domestic labor market and need a specific mechanism to increase professional success, taking into account risk factors.

The scientific novelty of the research results lies in the development of theoretical and methodological provisions on the extension of the working ability of older workers, the formation of their success, the mechanism and risks of using this age cohort in Russian economic entities.

1. Research Methods

In studies, materials from government sites and sites of research institutes and centers were taken into account; All-Russia Public Opinion Research Center (VCIOM) and RLMS monitoring; statistical materials published in periodicals and presented on the Internet, as well as a survey on the topic "Efficiency of company management" of employees at various levels of development, over two years of work. The basic methods were Norton D.P. and Strategic Human resource management (HRM) based on which the methodology of key performance indicators was developed for the effective management of the industrial sector and the elimination of the situation of inconsistency of interests in horizontal and vertical management.

2. Analysis of factors affecting the evolution of scientific ideas about the aging processes of those employed in the labor market

The labor market is usually considered in a wide and narrow sense. In a broad sense, the labor market is understood to be an integral part of a market economy system and one of the markets for factors of production. According to a narrow definition, the labor market is a system of social and labor relations to coordinate the interests of job seekers (including unemployed) and employers who have unoccupied jobs at enterprises between which labor contracts are concluded, the level of wages and working conditions are determined.

The object of sale on the labor market is a labor service, which is an action performed by labor, expressed in a beneficial effect – an object, product, service that an employer receives in exchange for wages (Afonin, Kamieva, Gagarinskaya, Voronin, Most, Akopyan, 2016).

The labor market is not static. It is influenced by factors that determine its development trends and affect the ratio of supply and demand of labor. The main researchers include economic, social, political, demographic factors (Dobrenkov, Afonin, Orlova, Pronina, Sabirova, 2017) (Figure 1).

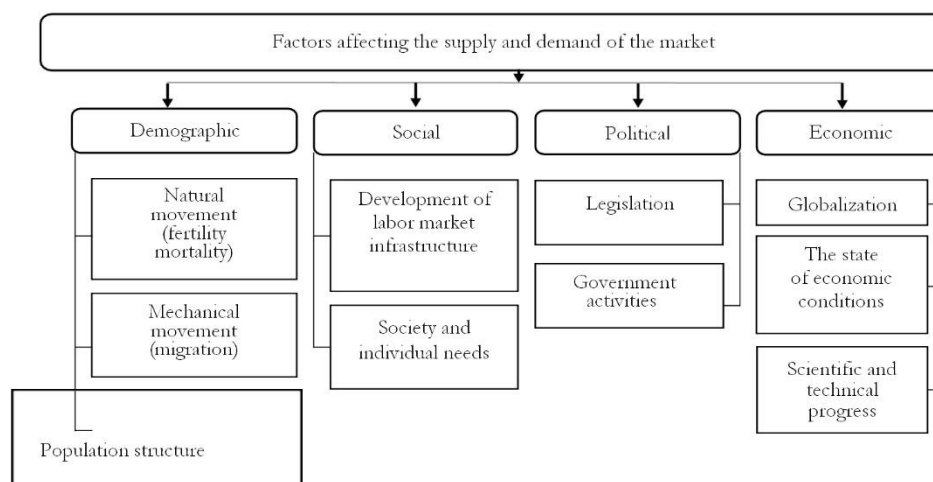


Figure 1. The main factors in the development of the labor market Economic factors are determined by globalization, scientific and technological progress, economic conditions (in the markets for finished goods and in the markets for factors of production).

Social factors include the development of market infrastructure (including education, training, healthcare), and the needs of society and the individual.

Economic and social factors in their influence on the total number and quality of the potentially able-bodied population are considered in close interconnection, uniting into a single group of socio-economic factors, this group determines the cyclical nature of the development of the labor market: during periods of economic recovery, the state adheres to a socially-oriented policy, since have a large amount of resources, and vice versa.

Political factors include features of state policy in the labor market, including features of legislative regulation of the terms of employment and admission of persons to certain types of activities, working hours, wages and other payments, etc.

Demographic factors affect the natural reproduction of labor resources, the ratio of those entering working age and stopping work by age due to disability or death. Qualitative demographic characteristics – gender and age, qualification structure, level of labor mobility (Afonin, Kamieva, Gagarinskaya, Voronin, Most, Akopyan, 2016) affect the social and labor activity of the workforce.

The age structure of the labor force is changing relatively slowly under the influence of fertility and mortality. With a long period of fertility growth, a rejuvenation of the population is observed; on the contrary, with a decrease in the birth rate, society is aging. The relationship between mortality and age structure is twofold and depends on in which age group its growth or decline is observed. So, if the mortality rate is growing among representatives of older age groups, this contributes to the rejuvenation of the population. The aging

of society will be observed if mortality rises at the age of 30 years and younger (Dobrenkov, Afonin, Orlova, Pronina, Sabirova, 2017). Migration movements alone do not entail immediate consequences for the age structure, the age of the migrating people, mass character, and duration in time are of importance.

Demographic processes associated with a decrease in the birth rate have led to a decrease in the working-age population. The age structure of the population has shifted to the border of old age, while elderly dependents who are outside the old age began to belong to more numerous generations than the able-bodied population, this situation is called demographic aging (Gagarinskii, Kuznetcova, Gagarinskaia, 2016).

The old age boundary is a conditional indicator, which is set near the modal retirement age; in UN publications, there are options for 60 and 65 years. According to the E. Rosset scale, demographic old age begins if the proportion of people aged 60 years and older in the total population exceeds 12%. According to the UN scale, the population is considered to be old, in which the proportion of people aged 65 years and older is 7% and above.

3. Analysis Results

The age limit of 7% for ages 65 and older was reached by many developed countries in the first half of the 20th century. The new frontier of aging is 21% (Afonin, Kamieva, Gagarinskaya, Voronin, Most, Akopyan, 2016). However, according to researchers' estimates of this problem, already in 2050, about one third of the population of European countries will be over 60 years old (Figure 2) (Lutz, Sanderson, Scherbov, 2008).

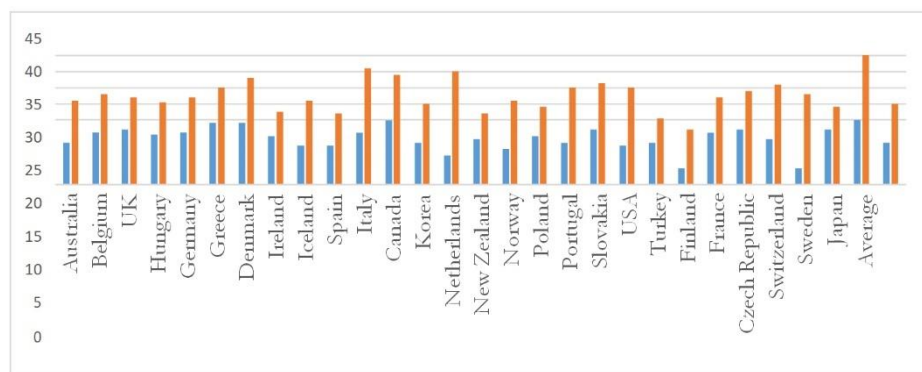


Figure 2. Population over 65 years in European countries, 2005 ■, 2050 ■ (%).

The United States, Canada, Britain, Germany and Japan qualify the UN as "old" countries. The "mature" countries with 4-7% of the population aged 65 and over include Brazil, Turkey and others. The "young" countries in which this indicator is less than 4% are Egypt, India, Mexico and others.

Based on the 2010 All-Russian Population Census, the aging rate of the population of the Russian Federation (for ages over 60) is 18.2% (for comparison, in the USA this indicator is 18.5%). The share of the oldest in the population of Russia is 2.9%, which is lower than in the USA, countries of Eastern, Northern, Western Europe and Japan. The load coefficient (the ratio of the sum of the number of children and persons of retirement age to the population of working age) in 2010 amounted to 623, in 2016 – 740, in 2017 – 764 disabled per 1000 people of working age, according to the average scenario, it will reach 831 by 2030.

An increase in the demographic burden coefficient, even despite a reduction in the burden of children, an increase in pension payments, and a relatively low retirement age, many call the evidence that older people will become an economic burden for Russian society. Since 2005, scientists have come to the conclusion that the study of aging society must not be based on the age of the subject, but on its potential for work.

Table 1. Indicators of the aging process in Russia.

Years	Share of population ages at which Life duration expected does not exceed years old (%)	Share of the population at age 65+ (%)	Medianth age the population (years)	Expected long awn of life at birth male (years)	Expected long awn of life at birth female (years)
2013	13,8	12,9	38,3	64,6	75,9
2050	17,2	23,0	43,7	71,6	81,1

The indicators on these scales (Table 1) indicate that in the general structure of the elderly population of Russia the average age of the active population is increasing, and an increase in the probability of surviving to old age contributes to an increase in the absolute number of people at this age.

According to expert estimates, it is necessary to make efforts to increase labor productivity and stop the trend towards a decrease in the growth rate. As the most effective tool for improving economic growth (along with migration, offshoring and feminization of the workforce (Gagarinskii, Kuznetcova, Gagarinskaia, 2016), an increase in the specific labor force structure is recognized the proportion of older people¹. In Europe, employment growth among older workers is taking place at a pace that is ahead of that for young people. From 2005 to 2011 employment among workers 65-69 years old increased from 8.8 to 10.5%, among workers 70-74 years old – from 4.3 to 5.2% (Dobrenkov, Afonin, Orlova, Pronina, Sabirova, 2017).

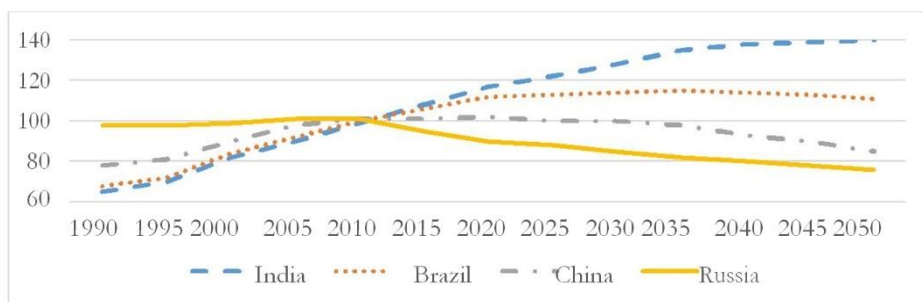


Figure 3. Working age population in the BRICS countries².

On the Russian labor market, age boundaries are also shifted. Despite the fact that the population of the Russian Federation increased to 147 million people in 2017 (taking into account the Republic of Crimea and the city of federal significance Sevastopol), the population of working age in 2018–2020 will continue the trend of the past years and decline from 81.9 million people in 2018 to 80.6 million people in 2020 year (Gagarinskii, Kuznetcova, Gagarinskaia, 2016) (Figure 4).

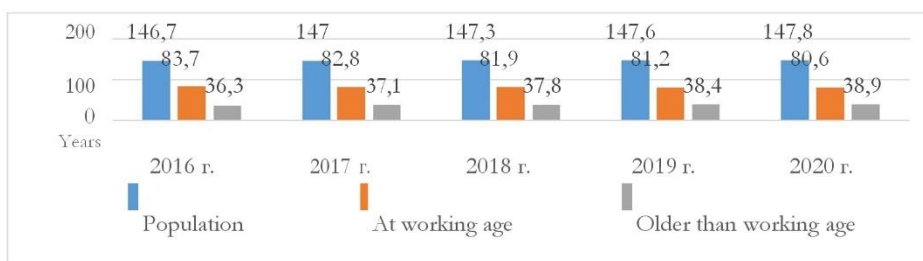


Figure 4. The average scenario of the demographic forecast of Russia.

The population younger and older than working age will increase, reducing the number of economically active population. Many elderly people who are considered to be potentially economically active will no longer be able to work due to health reasons, so aging of the potential work force also lowers the overall level of economic activity (Table 2).

Table 2. The distribution of the number of employed in the economy by age group, % of the total.

Year	Employed in the economy Total, %	Including age, years									
		Under 20	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-72
2012	100	0,7	8,3	14,3	13,3	12,7	11,6	12,3	13,4	8,8	4,6
2013	100	0,7	8,5	14,2	13,2	12,7	11,6	12,3	13,3	8,8	4,7
2014	100	0,6	7,8	14,5	13,5	12,8	12,0	11,8	13,3	9,0	4,8
2015	100	0,6	7,0	14,5	13,9	13,0	12,2	11,4	13,0	9,3	5,1
2016	100	0,6	6,4	14,5	14,3	13,2	12,5	11,2	12,7	9,4	5,3

The level of migration activity of the population of Russia is the highest among active ages (20-24 years old and 25-29 years old). A slightly lower migration activity is seen in groups of people aged 15-19 years and 30-34 years. For older age groups, a high degree of sedentary behavior is characteristic, which is largely determined by the high cost of moving, a habitual habitat for the environment. The need to continue working at a late age (after 60 years) can lead to even more consolidation of persons of this age group to the territory of residence.

Changes in the age structure of the population will contribute to an annual reduction in migration activity (according to various estimates, the trend will unfold after 2024 or 2028), which creates problems in resolving the issue of structural unemployment (Gagarinskii, A., Kuznetcova, I., & Gagarinskaia, G., 2016), since employers in such sectors as engineering, metallurgy, defense, construction show that Recently, the need for workers over 45 years of age in the domestic personnel market has increased by about 15%, as there is a need for specialists, a change which matured in the 90s not prepared (Afonin, Kamieva, Gagarinskaya, Voronin, Most, Akopyan, 2016). Increasing spatial mobility of people after the age of 40 can alleviate labor shortages in certain sectors of the economy.

Scientific and technological progress in the field of health care in industrialized countries has led to the fact that at the turn – XIX–XX centuries.

In most European countries, the standard of living of the population has significantly increased, which has reduced mortality in the middle and older age groups. Under the influence of these changes, life expectancy increased and disability began to persist in later ages. Until the XIX-XX centuries the average life expectancy of a person in Russia ranged from 31 to 33 years (Dobrenkov, Afonin, Orlova, Pronina, Sabirova, 2017), in 2017, the average life expectancy for women was 77.6 years, for men – 67.5 years.

The average life expectancy for 2016 in the most developed countries (Finland, Yugoslavia, Portugal, the USA, Canada, Japan, Israel, New Zealand, Cyprus, Hong Kong, Singapore, etc.) exceeds 79 years, in the least developed countries it is less than 60 years. The highest average life expectancy is observed in China, Japan (84 years), Switzerland, Spain, Singapore, Italy,

Norway, Australia (83 years). Lowest life expectancy in Sierra Leone, Central African Republic (52 years) (Gagarinskii, Kuznetsova, Gagarinskaya, 2016).

From the position of the state, the optimal retirement age minimizes the cost of retirement benefits, disability and employment policies (Lutz, W., Sanderson, W., & Scherbov, S., 2008). Pension system of Russia is in a state of reform: the size of the retirement pension is in direct proportion to retirement time and duration seniority¹, an increase in the generally established retirement age is expected (from 55 to 63 years for women (by 2034, at the suggestion of Russian President V.V. Putin, an increase is possible to 60 years) and from 60 to 65 years for men (to 2028)), a number of measures are planned to protect citizens of pre-retirement age from illegal dismissals. In addition, the law that entered into force in 2013 prohibits the announcement of job postings by gender, age, etc. (Dobrenkov, Afonin, Orlova, Pronina, Sabirova, 2017) is in force. The share of employees under the age of 24 in Russia is declining (Table 2).

4. Conclusion

It has been revealed that the following labor market transformation factors influence the evolution of scientific ideas about the aging of employees: demographic, social, political and economic. Demographic factors: the aging of the population, a decrease in its working-age part, an increase in the structure of the employed share of older workers.

Social factors: negative stereotypes of aging in society, social discrimination by age, low interest of employers in hiring and training age-related employees.

Political factors: problems of the “sandwich generation” that remains debatable at the state level, the transformation of pension legislation.

Economic factors: a high degree of geographic settledness of older age groups, structural unemployment, a tendency toward a decrease in wages with increasing age, increased competition in the international labor market caused by the globalization of the economy, the growth of international labor mobility, the development of precarious forms of employment, and the need for constant qualification new jobs (Table 3).

Table 3. Formation of a modern approach to the problem of aging of employees in Russia under the influence of market development labor factors

Name of the group factors	Components	Characteristic of modern stages in Russia	Labor market trends in Russia	A modern approach to aging employment
Demographic	The processes of birth rate; the processes of mortality; the processes of migration	<ul style="list-style-type: none"> – decline in fertility; – shift in age structure to border of old age; – high degree of settledness of older age groups 	<ul style="list-style-type: none"> – able-bodied population; – slowdown labor growth; – coefficient growth demographic load; – increase age of the active population; – growth in employment in old age sector in average 	<ol style="list-style-type: none"> 1) age workers are competitive labor force whose use leads to a mitigation of the deficit labor resources; 2) increase their labor mobility age workers contributes addressing structural unemployment; 3) disability persists in later ages; 4) stimulating the growth of economic activity among older workers leads to an increase in consumer spending and the creation of new jobs; 5) a negative attitude towards aging largely depends on the country's culture and its social norms; 6) a change in attitude towards old age: on the one hand, old age
Social	Development infrastructure labor market; the system health and education; needs of the society and personality	<ul style="list-style-type: none"> – increase in time for education; – increase in the rate of educated employees; – limited participation workers older than 45-50 years in training programs on enterprises; – increase in importance non-material values; – negative stereotypes old age 	<ul style="list-style-type: none"> – decrease in the share of employees in under the age of 24; – increase in number experienced workers; – unemployment growth on labor market among youth; – fertility in more late age; – exacerbation of structural unemployment; – slowing down the growth salary rate 	

Economic	Globalization; scientific technical progress	<ul style="list-style-type: none"> – inclusion in the world market labor; – transition to a knowledge economy; – improving living standards in most European countries; – a new characteristic of workers places; – decrease in average wage fees after 35 years; – lack of professionals in mechanical engineering, metallurgy, defense industry construction projects 	<ul style="list-style-type: none"> – development of non-standard forms of employment; – revenue reduction working pensioners; – adaptation of age workers to high performance work places; – senior employees age may be involved in unattractive to youth spheres 	<p>is perceived as a productive period of life, on the other, the presence of stereotypes of old age;</p> <p>7) the introduction of “lifelong learning” programs;</p> <p>8) the need to determine optimal term of office managerial authority Positions</p> <p>9) understanding the problems of generation "Sandwich" as requiring attention government and institutional decisions</p>
Political	Government activity, legislation	<ul style="list-style-type: none"> – pension reform 	<ul style="list-style-type: none"> increase in retirement under 63 years old for women (by 2034) and 65 years for men (by 2028 year) 	

Extension of life expectancy, increasing retirement aggravate the problems of the sandwich generation, which aggravates age-related segregation and the problem of prolonging working capacity, which is associated not with pushing the boundaries of life, but with creating conditions for older people to maintain their old abilities and be in demand.

A study of the identified factors made it possible to determine the features of their action on the Russian labor market. First, according to the values of the coefficient of population aging, in terms of the percentage of people classified as “oldest,” Russia is relatively young relative to other states. Secondly, in Russia a prerequisite has been formed for an increase in the share of older people in the structure of the labor force over the coming decade, which is caused by a predicted reduction in the growth rate of the labor force and a decrease in labor productivity and formed five provisions defining the

transformation of scientific views on the aging of the employed and, above all, on age as a criterion of suitability for the employee to fulfill his labor function and participate in certain activities. Firstly, there is a growing understanding that age workers are a competitive workforce, the use of which leads to a mitigation of staff shortages. Secondly, the growth of labor mobility of age-related employees is one way to overcome structural unemployment. Thirdly, stimulating the growth of economic activity of older labor forces leads to an increase in consumer spending and the creation of new jobs. Fourth, in accordance with changes in culture and social norms, old age is perceived as a productive period of life. Fifth, the possibility of resolving the problems of the sandwich generation through state and institutional solutions.

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