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Reserves for Increasing the Participation of the Population in the Labour Force

Abstract. In the conditions of long-continued reduction of the working-age population size in Russia, researchers and practitioners are in search for ways to compensate demographic losses. One of the ways is the increase the labour force participation rate for certain socio-demographic groups of the population. The article examines the reserves and opportunities for expanding the involvement of young people, older persons, women with underage children in the workforce.

Key words: participation in the labour force, youth, pensioners, women with minor children

JEL Codes: J01, J08, J21

In the conditions of long-continued reduction of the working-age population in Russia, various ways of compensating demographic losses are being discussed in scientific literature. Researchers note that the Russian labour market has come close to the threshold of a sharp drop in labour supply resulting from demographic factors [Kuzminov et al., 2015; Kapelushnikov, Oschepkov, 2014; Gimpelson, Zudina, 2017]. Among solutions are improvement of the quality of human capital, growth of labour productivity, attraction of skilled migrants [Kuzminov et al., 2015; Kuzminov et al., 2018]. Also, the possibility of additional involvement of the population from economically inactive cohorts in the economy is considered. At the same time, it is noted that for middle-age population the level of employment is now quite high, and the possibilities of involving younger and older persons in the workforce are very limited [Kapelushnikov, Oschepkov,

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2014; Gimpelson, Zudina, 2017; Gimpelson et al., 2017]. As to young people, limitations are associated with the situation when higher education practically turns into a social norm; in the case of older people, health is a limitation, as well as lack of competencies required in modern conditions, and as a result, age discrimination in the labour market [Gimpelson, Zudina, 2017; Gimpelson et al., 2017].

Features of the dynamics of economic activity of the population during the years of market reforms are discussed in detail in Russian economic literature. In the 1990s, there was a sharp decline in the labour force participation rate. It was a result of an excessively high level of economic activity of the population by the time of the beginning of market reforms; mass layoffs due to a sharp reduction in demand for labour and insufficient support for the unemployed; exit from the sphere of economic activity of non-core workers in the family for the purpose of housekeeping; reduction of the role of enterprises in the distribution of social benefits; development of alternative sources of income; growth in the demand of young people for vocational education; development of programs for early retirement [Chizhova, 1998; Gimpelson, 2002; Chizhova et al., 2011; Sindyashkina, 2003; Sindyashkina, 2010; Korovkin, 2001].

This article explores the possibilities of overcoming the limitations and expanding the involvement of young people, older persons, women with underage children in the workforce in the current conditions and in the future.

In 2005-2016, there was a steady trend of increasing the participation rate for the population of 15-72 years and of working age, both men and women. At the same time, diverse dynamics were observed for different age groups. There was a sharp decline in the participation rate of young people aged 15-19 — almost 40% in young men and by almost 2 times among girls. Participation rate of young people aged 20-24 also decreased, although not so much. For men, the participation rate increased in all age groups over 24 years, most intensively — in older ages, in the group of 60-72 years of age, the increase was 20%. For women aged 25-29, 30-34 and 35-39 years, the participation rate practically stabilized (the decrease is less than 2 p.p.). In older ages, participation rate increased, in the group of 60-72 years, the growth exceeded 40%. The combination of trends in the decline of youth participation in the labour force and growth in older age groups strengthens the workforce ageing process.

Compared to the OECD and EU countries, the participation rate in Russia can be assessed as high. Thus, the participation rate of the population of 15 years and older (in Russia — 15-72), Russia was ranked 6th in 2016 (after Iceland, Sweden, Estonia, Norway and New Zealand) (Table 1). The participation rate of the population in the most labour-intensive ages (25-54) in Russia is one of the highest among developed countries. In this indicator, Russia is ranked 4th after Iceland, Sweden and Switzerland, and the gap between them is rather insignificant and within the statistical error. Thus, the reserves for increasing the participation rate of the population of 25-54 years in Russia are minimal.

Table 1. Comparison of countries by participation rate of younger and older age groups in 2016.

Rank	Country	Age 15-24	Rank	Country	Age 55-64	Rank	Country	Age 65 and over
1	Iceland	82.5	1	Iceland	86.3	1	Iceland	40.6
2	Switzerland	68.4	2	Sweden	79.8	2	Korea	31.5
3	The Netherlands	68.2	3	New Zealand	78.6	3	Mexico	27.2
4	Australia	66.9	4	Switzerland	74.3	4	Estonia	26.0
5	Denmark	66.2	5	Norway	74.1	5	New Zealand	23.4
6	Canada	63.7	6	Japan	73.6	6	Japan	22.8
7	New Zealand	62.6	7	Germany	71.3	7	USA	19.3
8	United Kingdom	61.9	8	Estonia	70.8	8	Norway	18.9
9	Austria	57.5	9	Denmark	70.6	9	Sweden	16.2
10	Norway	55.3	10	Lithuania	70.0	10	Canada	13.7
11	USA	55.2	11	The Netherlands	68.4	11	Australia	12.6
12	Sweden	54.7	12	Korea	68.0	12	Switzerland	12.1
13	<i>Russia</i>	<i>53.6</i>	13	Latvia	<i>67.6</i>	<i>13</i>	<i>Russia</i>	<i>12.0</i>
14	Finland	53.5	14	Finland	66.4	14	Turkey	11.8
15	Malta	50.4	15	United Kingdom	66.0	15	Portugal	11.1
16	Germany	49.3	16	Canada	65.8	16	Finland	10.8
17	Japan	44.8	17	Australia	65.2	17	United Kingdom	10.7
18	Estonia	44.3	18	USA	64.1	18	Ireland	10.6
19	Mexico	44.2	19	Ireland	61.1	19	Denmark	8.4
20	Turkey	42.4	20	Czech Republic	60.8	20	Romania	8.2
21	Ireland	40.2	21	Spain	59.2	21	Latvia	8.1

End of table 1

Rank	Country	Age 15-24	Rank	Country	Age 55-64	Rank	Country	Age 65 and over
22	Latvia	39.4	22	Cyprus	58.8	22	Lithuania	8.0
23	France	37.2	23	Bulgaria	58.8	23	Cyprus	7.4
24	Croatia	37.2	24	Portugal	58.5	24	The Netherlands	7.1
25	Spain	36.9	25	Mexico	56.1	25	Germany	6.6
26	Cyprus	36.8	26	<i>Russia</i>	55.2	26	Czech Republic	6.3
27	Lithuania	35.3	27	Slovakia	53.9	27	Austria	5.0
28	Poland	34.5	28	France	53.7	28	Poland	4.9
29	Slovenia	33.7	29	Italy	53.4	29	Bulgaria	4.3
30	Portugal	33.2	30	Hungary	52.1	30	Hungary	4.2
31	Slovakia	32.4	31	Austria	51.7	31	Italy	4.0
32	Hungary	32.3	32	Poland	48.3	32	Malta	3.5
33	Czech Republic	32.0	33	Belgium	48.1	33	Greece	3.2
34	Korea	30.5	34	Greece	44.9	34	Slovenia	3.2
35	Luxembourg	28.5	35	Malta	44.7	35	France	2.9
36	Belgium	28.5	36	Romania	44.2	36	Croatia	2.9
37	Romania	28.0	37	Croatia	42.2	37	Slovakia	2.7
38	Italy	26.6	38	Slovenia	41.2	38	Belgium	2.2
39	Greece	24.6	39	Luxembourg	40.4	39	Spain	2.0
40	Bulgaria	23.9	40	Turkey	35.6	40	Luxembourg	0

Source: [Labour Force Participation Rate. OECD Database...]

At the same time, in the younger and older age groups, participation rate is significantly lower than in the countries of Northern Europe and other countries with a high participation rate. It appears that it is in the younger and older age groups that has a reserve for expanding participation rate of the Russian population.

The youth. The participation rate of young people 15-24 years of age in comparison with OECD countries and the EU is not as high as of the population of 25-54 years (13th after the countries of Northern Europe, USA, Canada and New Zealand).

Compared to the period before 1992, the participation rate of Russian youth decreased sharply: at the age of 15-19 years for men — by 3.2 times, for women — by 4.2 times, at the age of 20-24 years by 1.3 times for men, for women — by 1.4 times (Table 2).

Table 2. Participation rates by age and sex groups in Russia

Year	Total	including aged, years									
		under 20	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60+
Men											
1992	78.2	34.9	83.5	95.1	96.2	95.7	95.7	94.5	89.8	79.3	28.5
2000	71.3	20.3	74.9	92.0	93.8	93.5	91.8	90.7	86.7	71.0	25.0
2016	75.9	10.9	64.6	95.7	96.0	95.5	94.9	93.6	90.1	79.6	28.1
Women											
1992	64.1	29.3	74.9	85.4	89.6	92.2	93.5	91.4	81.5	38.5	13.1
2000	59.5	16.4	62.5	80.5	84.1	88.3	90.2	87.7	79.4	38.7	12.3
2016	63.8	7.0	52.4	81.0	83.9	88.2	91.6	91.6	85.7	53.9	19.2

Sources: [Labour Force Survey — 2010-2017, Rosstat; Economic Activity of the Population of Russia — 2006]

The decline in participation rate of young people during this period was due to increased demand for vocational education; the increase in the standard of living of the population during this period also influenced the participation rate of young people, making it possible to choose studying with work being discontinued. In addition, the decrease in the participation rate of young people was caused by a change in the ratio of students in terms of vocational training — the growth in the number of students in higher education institutions and the reduction in the number of students in institutions of primary and secondary vocational education, as well as the inclusion of primary vocational education institutions in the system of secondary vocational education. Training in the system of secondary specialized education can be completed at the age of 18-19

years, higher education assumes a longer period of study (until the age of 22-24 years), which significantly affects the decline in the participation of youth of 20-24 years in the workforce.

It is hardly advisable to stimulate the participation of younger age groups in the labour force: people 15-19 years of age basically would not have completed vocational education, and those 15-16-years of age would not have graduated from secondary school. It is reasonable to provide adolescents with real opportunities to work on vacation, in some cases — after lessons during the school year. However, these measures will be important primarily not from the perspective of expanding the labour supply, but rather from socio-pedagogical perspective.

Increasing participation rate of young people 20-24 years of age is reasonable from the viewpoint of both mitigating the workforce ageing and compensation of the demographic losses of the labour-age population.

The participation of this group in the labour force is constrained, first of all, by a sharp increase in the demand of young people for higher education, an extension of the terms for obtaining higher education through the introduction of a two-level system, inadequate quality and low prestige of postal / evening / correspondence forms of education, the difficulty of combining education on a full-time basis with work, even in the case of part-time employment.

The birth of children is a less important factor of decreasing the participation rate of young women; the fertility rate in the group of women 20-24 years of age has been declining along with the participation rate since the beginning of the 1990s. Meanwhile, the birth rate increased in the ages of 25-29, 30-34, 35-39, 40-44 years. It is at these ages (along with younger groups) that the participation rate of women remains below the level of 1992, whereas among the middle-aged men, participation rate corresponds to the level established before the market reforms began.

According to our estimates, with an increase in the participation rate of 20-24 year old to the level of 2000 (74.9% for men, 62.5% for women), the supply of labour could increase at the expense of this age group by 850 thousand persons by 2035 (according to the middle population forecast of Rosstat). (Table 3)

Table 3. Forecasted estimate of the possible increase in labour supply by increasing the youth participation rate

	2020	2025	2030	2035
Population of 20-24 years, thousand persons				
men	3758.9	3559.2	3806.0	4288.5
women	3602.5	3398.2	3587.3	4042.1

End of table 3

	2020	2025	2030	2035
Change in the participation rate as compared to 2016, percentage points				
men	+10.3	+10.3	+10.3	+10.3
women	+10.1	+10.1	+10.1	+10.1
Increase in the labour force, thousand persons				
men	387.2	366.6	392.0	441.7
women	363.9	343.2	362.3	408.3
Both sexes	751.0	709.8	754.3	850.0

Sources: the table is calculated by the author on the basis of [Presumptive Population of the Russian Federation until 2035] and the data of Table 2.

Women with minor children. One of the groups traditionally seen as a reserve for increasing participation rate are women with under-age children. However, data analysis shows that there are practically no reserves to increase the participation of this group in the workforce. The level of participation rate of women aged 20-49 years, having and not having children under the age of 18, in 2010-2016 differed only by 0.9-1.9 percentage points. Participation rate is significantly reduced only among women with a child under the age of two (their participation rate in the labour force in 2016 was 50.6% compared to 83% for women who do not have minor children) (Table 4). Even in the group of women with children 3-6 years of age, participation in the workforce is slightly higher than for women who do not have minor children. To some extent, this can be explained by a decrease in the living standard of the family after the birth of the child and the need for paid work for both parents.

The participation of women in the labour force, depending on the number of children in the family, is as follows (table 4). The participation of women with one minor child in the labour force is higher than that of women who do not have minor children (by 1.2-3.2 p.p.), in families with two children it is lower by 3.0-5.4 p.p. etc., and in women with three or more children the gap is already 16.6-20.8 p.p. At the same time, Rosstat data do not specify the age of children in families with 2-3 or more children, namely age, and not the number of children can act as a deterrent to participation in the workforce.

Table 4. Level of participation in the labour force of women 20–49 years old with and without children under 18, %

Year	Women with children under 18 years old	including					Women who do not have children under 18 years old
		1 child	2 children	3 or more children	of them with children aged		
					0–6 years	including the age of the younger child	
					0–2 years	3–6 years	
2013	9.9	77.4	63.8	68.7	-	-	81.6
2014	80.3	77.2	63.6	68.8	-	-	81.9
2015	80.0	78.3	64.7	69.7	-	-	81.3
2016	81.1	76.3	63.9	68.0	-	-	81.3
		77.0	62.2	68.0	50.3	83.7	81.5
		76.5	62.2	68.4	49.8	83.3	81.9
		78.0	63.7	69.7	50.6	83.6	83.0
2017 III quarter	81.7	79.1	63.2	70.1	50.5	83.7	84.0

Sources: the table is compiled by the author on the basis of [Labour Force Survey — 2010–2017, Rosstat; Labour Force, Employment and Unemployment in Russia — 2016]

It is not advisable to stimulate the expansion of participation rate of women with children under two years of age, as well as mothers with many children. However, the opportunities for their employment must be expanded so that women with children have a free choice between paid employment and a refusal to participate in the labour force. The creation of conditions for the participation of women with minor children and those with many children in the workforce should be viewed, first of all, not from the positions of increasing the workforce, but from the position of providing them with equal opportunities for raising children, increasing income, and implementing their professional competencies.

Along with the high participation rate among women with minor children and large families, there is a relatively high unemployment rate among them. So, in 2016 the unemployment rate among women with three or more children was 10.5% (4.7% for women with one child), among women with children of preschool age — 6.9% (in general among women with children — 5.3%) [Labour Force Survey, 2017]. Therefore, for women with children, it is more urgent not to encourage involvement in the labour force, but to reduce unemployment and increase employment opportunities.

Persons of older ages. The level of participation rate of men of older ages (55-59, 60-72) reached the level of 1992, and that of women exceeded it by 1.4-1.5 times (Table 2). Nevertheless, participation rate of senior persons in Russia is significantly lower than in many EU and OECD countries (among 40 countries Russia is ranked 26th by participation rate of population aged 55-64 and 13th by participation rate of population of 65 and over) (Table 1).

It seems that in older ages there are reserves for increasing the participation rate, especially in the age of 55-59 years for men and 50-54 and 55-59 years for women. The lower participation rate of persons of pre-retirement age (55-59 for men and 50-54 for women) compared to middle-aged people is largely due to the existing practice of granting early retirement pensions. Thus, the participation rate of men 55-59 years in 2016 was by 10.5 percentage points lower than in the previous age group, and of women aged 50-54 — by 5.9 percentage points. (Table 2). Stimulating participation of people aged 65-72 years in the labour force seems less expedient due to the deterioration of health and reduction of working capability at this age.

Table 5 presents an estimate of the reserves for increasing the involvement of the older population in the labour force (according to the middle Rosstat population forecast). The following guidelines were adopted in the calculations: in the age groups of men and women aged 50-54 years and men of 55-59 years, the participation rate should be brought closer to the level of the previous groups; in the group of women aged 55-59 years, a significant gap with the level of men, which is not observed at younger ages, should be reduced, as a result, an increase of 30% is possible; at the age of 60-64 years for both men and women the current participation rate is about 50% of the level of the previous group, we

should focus on maintaining this ratio with increasing activity of the previous groups. Estimates were made without taking into account the possible increase in the retirement age.

Table 5. Forecasted estimate of the possible increase in labour supply by increasing the level of participation of older persons in the labour force

		2020	2025	2030	2035
Population, thousand people					
50-54 years	men	4105.7	4450.7	4741.6	5329.5
	women	4729.5	5112.2	5449.8	5964.9
55-59 years	men	4652.3	3821.5	4148.0	4428.7
	women	5757.7	4640.7	5015.8	5352.0
60-64 years	men	4255.2	4191.7	3480.8	3784.9
	women	5837.0	5532.3	4489.0	4863.9
Change in the participation rate as compared to 2016, percentage points					
50-54 years	men	+2	+2	+2	+2
	women	+3	+3	+3	+3
55-59 years	men	+9	+9	+9	+9
	women	+9	+10.8	+10.8	+10.8
60-64 years	men	+5.2	+5.2	+5.2	+5.2
	women	+4.7	+5.6	+5.6	+5.6
Increase in the labour force, thousand people					
50-54 years	men	82.1	89.0	94.8	106.6
	women	141.9	153.4	163.5	178.9
55-59 years	men	418.7	343.9	373.3	398.6
	women	518.2	501.2	541.7	578.0
60-64 years	men	221.3	218.0	181.0	196.8
	women	274.3	309.8	251.4	272.4
50-64 years — total		1656.5	1615.3	1605.7	1731.3

Sources: the table is calculated by the author on the basis of [Presumptive Population of the Russian Federation until 2035; Labour Force, Employment and Unemployment in Russia — 2016.] and the data in Table 2.

It should be noted that the possibilities for additional involvement of the older population in the labour force closely overlaps with issues of the total life expectancy and the expected duration of a healthy life. The health status of older persons, along with barriers to the labour market significantly inhibits their participation in the labour force. In the long term, along with a decline in the working-age population size, one can expect an increase in the employers'

loyalty to older workers, thus the health status remains the main constraint (along with motivation, family situation and personal attitudes).

In terms of the life expectancy of the population at the age of 65, Russia lagged behind the average for the EU countries by 18.3% in 2015, including men's life expectancy — by 25.1% and by 16% for women [The Demographic Yearbook of Russia; Eurostat. Digital resource.]. At the same time, the gap between the most prosperous countries (namely, France, Spain, Switzerland, and Italy) exceeds 30% for men and 20% for women. Likewise, Russia lags behind the indicator of the duration of a healthy life, which limits the possibility of involving the older population in the labour force.

However, in developed countries, there is no proved relationship between the duration of overall and healthy life in the elderly and their participation rate. For example, France and Spain, which are the leaders in life expectancy at the age of 65, however, they have one of the lowest levels of participation rate of this age group: life expectancy is 21.6-21.1 years, participation rate is 2.9-2.0%. Belgium and Greece are also at the bottom of the list of the participation in rate of the oldest age group (2.2% and 3.2%), while the life expectancy at the age of 65 years is close to the EU average. On the contrary, Estonia with a life expectancy below the EU average is among the leaders in the participation rate of the elderly population. Latvia, Lithuania and Romania, significantly behind the EU average life expectancy at the age of 65, have average participation rates of this age group in the workforce. This gives grounds to consider the population of older ages as a reserve for expanding the labour supply in Russia.

Thus, as the results of calculations show, an increase in the participation rate of certain socio-demographic groups can significantly slow down labour supply caused by demographic factors. The main groups of the population, whose involvement in the labour force will compensate the demographic losses of the working-age population, are youth of 20-24 years, persons of pre-retirement age and persons of older ages (up to 65 years). Expansion of their participation in the labour force can compensate for over 70% of the demographic losses. It should be borne in mind, however, that increased participation rate is in many cases possible under part-time employment, as a result, the real scope of compensation in terms of working hours may be significantly lower.

Among measures aimed at increase of the participation rate of young people, expanding opportunities for combining work and study, improving the quality and prestige of secondary specialized education as an alternative to higher education, improving the quality of postal / evening / correspondence forms of education should be noted.

Both for young people and for persons of retirement and pre-retirement age, it is of great importance to expand employment opportunities for part-time work or a flexible schedule. This is also relevant for facilitating the participation of such groups of the population as women with under-age children, mothers with

many children and disabled people. In the Russian labour market, part-time employment is much less common than in many EU countries. For example, in 2017, 4.8% of the employed worked no more than 30 hours per week, 34% of whom were at the age of 15-19, 7.3% were at the age of 20-24 years, 5.5% were at the age of 55-59 years and 10.6% were aged 60-69 [Labour Force Survey, 2017].

In recent decades, the share of voluntary part-time work increased in many countries of the world. This form of employment is an important factor in the participation rate of women with family responsibilities, young studying people, and older people. As noted in the materials of the International Labour Office [Non-standard forms of employment, 2017], 27% of women in Europe worked part-time, as it enables combining work and care for family members, and 26% — because they could not find a full-time job. Among men, 19% chose part-time employment due to combination of work and study, and 40% could not find a full-time job. This data applies to all European countries, including the countries of Eastern Europe.

In most EU countries with a high participation rate (the Netherlands, Denmark, Norway, Iceland, Sweden), voluntary part-time employment is widespread, especially among young people and older people. Thus, in the Netherlands in 2016, 80% of employed youth aged 15-24 worked under part-time employment, in Denmark — 68.5%, Norway — 60.2%, and in countries such as Bulgaria, the Czech Republic, Croatia, Latvia, Lithuania, Hungary, Poland and Romania — 7.4-16.5%. Among those aged 55-64, part-time employment was 49.2% in the Netherlands, 44.1% in Switzerland, 34.3% in Belgium (22.0% on the whole for the EU-28) [Persons employed part time. Eurostat]. As a rule, the reason for part-time employment among young people is study. Thus, the institutional structure of the labour market in these countries allows young people to combine work and study, which in turn ensures a high level of youth participation in the labour force.

Reference list

1. Chizhova L. S. (ed.). 1998. Employment and the labour market: new realities, national priorities, prospects. Moscow. Nauka. (in Russian)
2. Chizhova L. S., Sadovaya E. S., Kuzmin V. V. et al. 2011. Innovative Economy: Employment, Labour Motivation, Labour Efficiency.. Institute of macroeconomic research. Moscow. Economics. (in Russian)
3. The Demographic Yearbook of Russia. Digital resource. Rosstat — URL: http://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/statistics/publications/catalog/doc_1137674209312
4. Economic Activity of the Population of Russia — 2006. Digital resource Rosstat — URL: http://www.gks.ru/bgd/regl/B06_61/Main.htm (in Russian)
5. Eurostat. Digital resource. — URL: <http://ec.europa.eu/eurostat/tgm/refreshTableAction.do?tab=table&plugin=1&pcode=tsdph220&language=en>

6. Gimpelson V.E. 2002. Economic activity of the population of Russia in the 1990s. Moscow. Publishing House of the Higher School of Economics. (in Russian)
7. Gimpelson V.E., Kapelyushnikov R.I., Roshchin S.Y. (eds.) 2017. Russian labour market: trends, institutions, structural changes. Moscow. Center for Strategic Research. (in Russian)
8. Gimpelson V.E., Zudina A. A. 2017. Demographic issues of the labour market. *Demoscope Weekly*. 729-730. <http://www.demoscope.ru/weekly/2017/0729/tema01.php> (in Russian)
9. Kapelushnikov R.I., Oschepkov A.Y. 2014. Russian labour market: paradoxes of post-crisis development. *Issues of Economics*. 7: 66-92. (in Russian)
10. Korovkin A.G. 2001. Dynamics of Employment and the Labour Market: Issues of Macroeconomic Analysis and Forecasting. Moscow. MAKSPress. (in Russian)
11. Kuzminov Y.A., Ovcharova L.N., Jacobson L.I. (eds.). 2015. Social policy: long-term trends and changes in recent years. Report to the XVI April International Scientific Conference on Economic Development and Society. Moscow, April 7-10, 2015. Moscow, Higher School of Economics. Moscow. Publishing House of the Higher School of Economics. <https://www.hse.ru/pubs/share/direct/document/178017082> (in Russian)
12. Kuzminov Y.A., Ovcharova L.N., Jacobson L.I. (eds.). 2018. How to increase human capital and its contribution to economic and social development: report theses. Moscow. Publishing House of the Higher School of Economics. (in Russian)
13. Labour Force, Employment and Unemployment in Russia — 2016. Digital resource Rosstat — URL: http://www.gks.ru/bgd/regl/b16_61/Main.htm (in Russian)
14. Labour Force Participation Rate. Digital resource. OECD Database. URL: <https://data.oecd.org/emp/labour-force-participation-rate.htm#indicator-chart>
15. Labour Force Survey — 2010-2017. Digital resource Rosstat — URL: http://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/statistics/publications/catalog/doc_1140097038766 (in Russian)
16. Non-standard forms of employment. 2017. Analysis of issues and prospects for solutions in different countries. Review version. International Labor Office. Geneva. ILO. Digital resource URL: http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_554952.pdf
17. Persons employed part time. Digital resource. Eurostat — URL: <http://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&language=en&pcode=tps00159&plugin=1>
18. Presumptive Population of the Russian Federation until 2035. Digital resource Rosstat — URL: http://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/statistics/publications/catalog/doc_1140095525812 (in Russian)
19. Sindyashkina E. N. 2003. Demographic and socio-economic factors that form supply in the Russian labour market. In Papanov K. V., Sokolov E. I. (eds.). Proceedings of the scientific conference “Lomonosov Readings — 2003” Moscow, Faculty of Economics of the Lomonosov Moscow State University. Moscow. TEIS. (in Russian)
20. Sindyashkina E. N. 2010. Economic activity of the population and the factors that determine its level. In Collected articles for the round table on “The Federal Law On Employment of the Population in the Russian Federation: 20 years since adoption”. Federal Service for Labour and Employment; the Plekhanov Russian Economic University. Tver, SFC Office Pp. 178-184. (in Russian)