

## ORIGINAL PAPER



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## Self-Employed Finance in the New Russian Economy

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### ABSTRACT

We based our study on statistical, actuarial, and predictive methods, including the method of moving ages. We assessed qualitatively and quantitatively Russian self-employed. Their potential for participation in pension insurance is assessed using foreign experience. We proposed promising instruments for pensions of self-employed. We concretized the concept of self-employed for the Russian pension system based on international approaches. Their number, gender, age and professional composition and income level are estimated, including international comparison. Further, we predicted the demographic number of self-employed as potential recipients of social pensions. Their income potential for pension insurance is assessed. Finally, we developed recommendations for using the best foreign experience to expand the coverage of self-employed with pension insurance.

**Keywords:** self-employed finance; self-employed without employees; dependent self-employed; retirement benefits; retirement savings; contributions; income; social pension; pension insurance coverage

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## INTRODUCTION

Self-employed finance — a broad category that includes: self-employed income, savings, taxes and benefits, credits, investments, pension accumulations and pension rights. This article focuses on three critical components of finance for the self-employed that determine their place in the new economy. These are the boundaries and structure of the self-employed (including the professional, taking into account the degree of use of new knowledge, information technologies), the income of the self-employed and their pension schemes.

Income generation for the self-employed is characterized by variable size and less dependence and affiliation on occupational groups. The transition to self-employment, even for a short period, reduces the level of future pension coverage. Poverty of older persons is linked to inadequate coverage of self-employed pension insurance.

Self-employment is an important factor guiding the transformation of public finances [1, 2]. OECD (Organisation for Economic Co-operation and Development) classified self-employment as predominantly non-standard forms of employment in 2019 (16.7% of OECD employees in 2019). Including temporary workers (13%) and part-time workers (15%), non-standard forms of employment account for a third of total employment.<sup>1</sup> New classifications of self-employed have emerged:

- *self-employed traditional* (farmers, craftsmen, traders) and *liberal professions* (lawyers, notaries, engineers, architects, doctors, painters, artists, musicians, etc.) [3];
- *self-employed with employees and self-employed without employees* [4, 5]. The growth of the latter increases the innovation of the economy [6, 7], but reduces future pensions,

extends the scope of “old” poverty [8]. These self-employed earn less than employed [9]. The following groups are distinguished:

- dependent self-employed — “self-employed without employees who in the last 12 months worked for a single client or had a dominant client and this client determined the number of hours of work for the self-employed”.<sup>2</sup> [10];
- *freelancers*, which are characterized by professionalism, apply information technologies and manage risks. They are linked to qualitative changes in the labor market [11, 12]. More narrowly defined are “*independent professionals*” (*I-pros*), offering only their own labour in the service sector [13];
- *involuntary self-employed* excluded from the labour market (displacement factors are often considered in relation to business cycles [14]).

For the categories listed above: separate pension schemes for the self-employed (Luxembourg, Greece, Italy, Japan, Korea, Poland, Turkey); special conditions within occupational schemes for employees (France); compulsory participation for part of the self-employed (Germany); obligation to pay contributions obligation of self-employed large clients to pay contributions for self-employed (Spain, Italy, Portugal, Germany) [1].

In Russia, self-employment research focuses on legalizing [15, 16]. The experts draw conclusions about the insignificant number of self-employed in the economy [17]. It's noted that the concepts of “self-employed” and “independent workers”, “informal employed”, “registered self-employed” are often confused [18]. However, for the Russian pension system, the category of self-employed persons without employees of working age with voluntary participation in pension insurance is relevant [16, 18].

<sup>1</sup> OECD (2019), Pensions at a Glance 2019: OECD and G20 Indicators, OECD Publishing, Paris, chapter 2. URL: <https://doi.org/10.1787/b6d3dcfc-en>.

<sup>2</sup> The main results from the 2017 Labour Force Survey (LFS) ad-hoc module on «Self-employment». Eurostat. Self-employment statistics, 2018. URL: [https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Self-employment\\_statistics](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Self-employment_statistics).



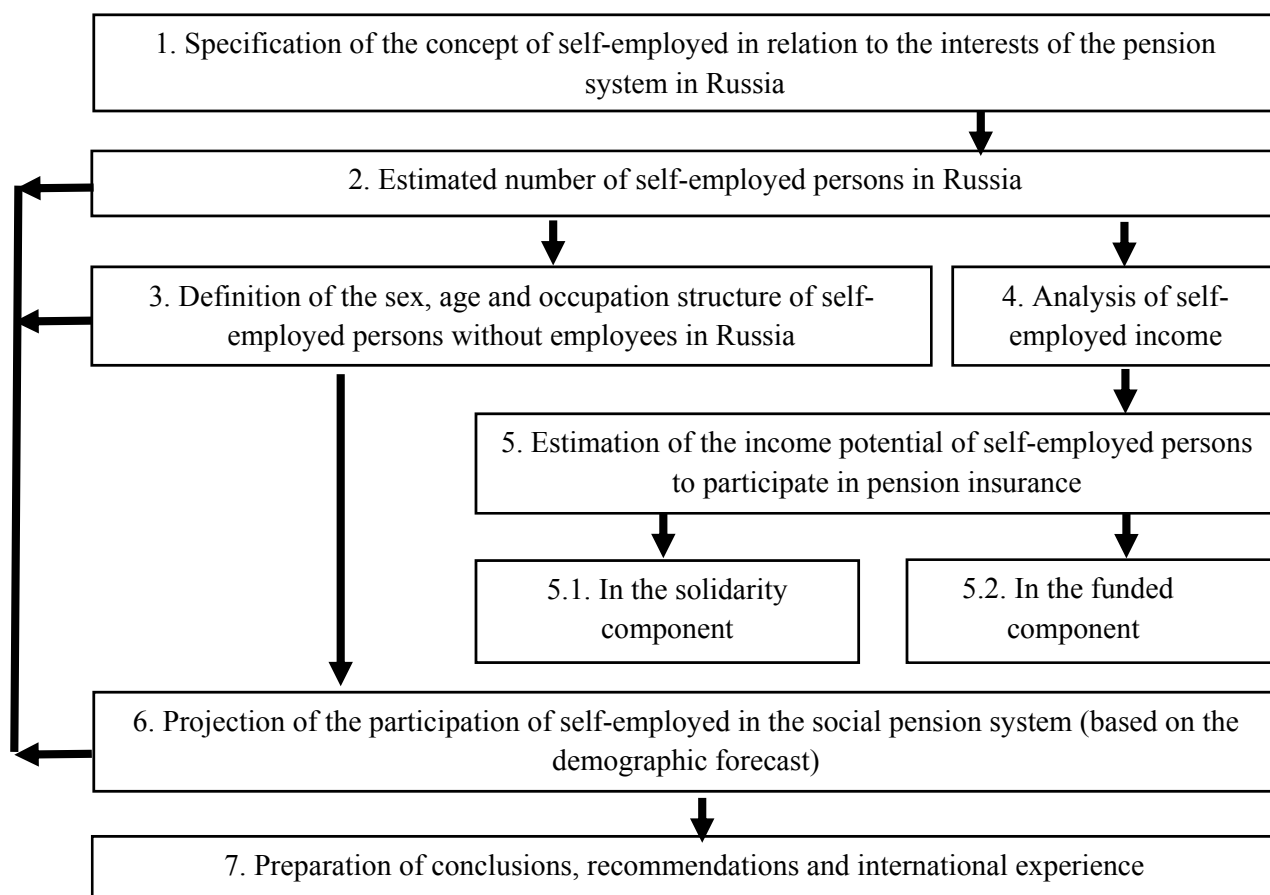


Fig. 1. Общий алгоритм исследования / General research strategy

Source: compiled by the authors.

This determines the wide range of estimates of the number of self-employed in Russia: from **16–17 million** (2019<sup>3</sup>) to **2 million people** (professional income tax payers as at 23 March 2021<sup>4</sup>). According to OECD, Russia had one of the lowest rates of self-employment (independent workers) — 6.7% of the employed population in 2019 (OECD average — 14.1%<sup>5</sup>).

The Russian authors note that it is impossible to resolve questions relating

to self employed pensions without a comprehensive reform of the pension system and the harmonization of pension rights and State obligations [18, 19]. Otherwise, extending the coverage of the self-employed through the State Compulsory Pension System (CPS) will reduce the average amount of the insurance pension [19].

There is another position — it's important to extend pension insurance coverage to as many self-employed persons as possible, in order to reduce the burden on the State budget in the form of social pension payments to self-employed categories, whose number will only increase.

The problem of self-employed finance — low incomes [1], making their participation in both solidarity and funded pension schemes futile. Taking into account

<sup>3</sup> RANEPa Social Survey: in Russia about 17 million self-employed — a quarter of the working population. URL: <https://social.ranepa.ru/novosti/item/socopros-ranhigs-v-rossii-okolo-17-mln-samozanyatyh-chetvert-ot-rabotayushhego-naseleniya>.

<sup>4</sup> Information from the Federal Tax Service dated 23.03.2021. "Two million self-employed persons registered in Russia". URL: [https://www.nalog.ru/rn77/news/activities\\_fts/10747467/](https://www.nalog.ru/rn77/news/activities_fts/10747467/).

<sup>5</sup> OECD (2020), Self-employment rate (indicator). DOI: 10.1787/fb58715e-en



international experience, it can be concluded that for Russia there may be alternative ways of organizing pension insurance for self-employed within the framework of quasi-mandatory models with partial coverage of certain categories [1]. However, the specification of their application in prospective mechanisms is based on knowledge of the number and structure of the self-employed, their income potential.

The slow adaptation to the new tasks of the statistical apparatus explains the lack of macroeconomic research on the finance of the self-employed. This article defines the objectives of a comprehensive qualitative and quantitative analysis of the self-employed for the benefit of the pension system, estimation of their income potential, preparation of recommendations for the organization of pensions for the self-employed, taking into account international practice.

## MATERIALS AND TECHNIQUES

To solve the problems the complex method is applied in the composition of: specification of the concept of “self-employed”; statistical estimates of the number, structure and income of self-employed; actuarial valuation of their participation in pension insurance; demographic projection of the number of self-employed persons to estimate future social pension payments (fig. 1).

**(1) Specification of the concept of “self-employed”:** recommendations of the International Labor Organization (ILO)<sup>6</sup>; approaches in OECD and Eurostat statistics; mechanisms for legalizing self-

employment in Russia: providing services for personal, household and (or) related needs<sup>7</sup>; professional income tax payers; private practitioners.<sup>8</sup>

**(2) Estimated number of self-employed persons in Russia:** Quantitative analysis with combined use: sample microdata from the Rosstat labor force survey (LFS Rosstat)<sup>9</sup>; microdata from the Russia Longitudinal Monitoring Survey (RLMS).<sup>10</sup> The estimation algorithm is shown in fig. 2.

**(3) Determination of the sex, age and professional structure of the selected group of self-employed persons, motivation for self-employment:**

- for the sex, age and professional structure: Rosstat microdata, sample of self-employed according to the working definition (Table 3), their distribution among 39 sub-groups by OKZ 2014<sup>11</sup> as part of:

*freelancers*: intellectuals with a wide range of clients, skills and knowledge (including information and knowledge-intensive technologies);

*technology specialist*: intellectuals with intermediate specialized qualifications with professional knowledge (including technology, processes);

*operational specialist*: workers trained in the use of professional appliances, machines, tools and equipment;

*manual workers*, unskilled manual labour.

- to assess the motivation of the self-employed: microdata of RLMS (fig. 3).

<sup>7</sup> art. 23 Civil Code of the Russian Federation, p. 7.3 art. 87, p. 70 art. 217 Fiscal Code of the Russian Federation.

<sup>8</sup> art. 227 p. 1, subp. 2; art. 227.1, p. 1, subp. 2; art. 346.12, p. 3, subp. 10; art. 419, p. 1, subp. 2; art. 422, p. 1, subp. 2; art. 430 p. 4, subp. 2; art. 432, p. 5.

<sup>9</sup> Rosstat microdatabase. URL: [https://www.gks.ru/labour\\_force](https://www.gks.ru/labour_force).

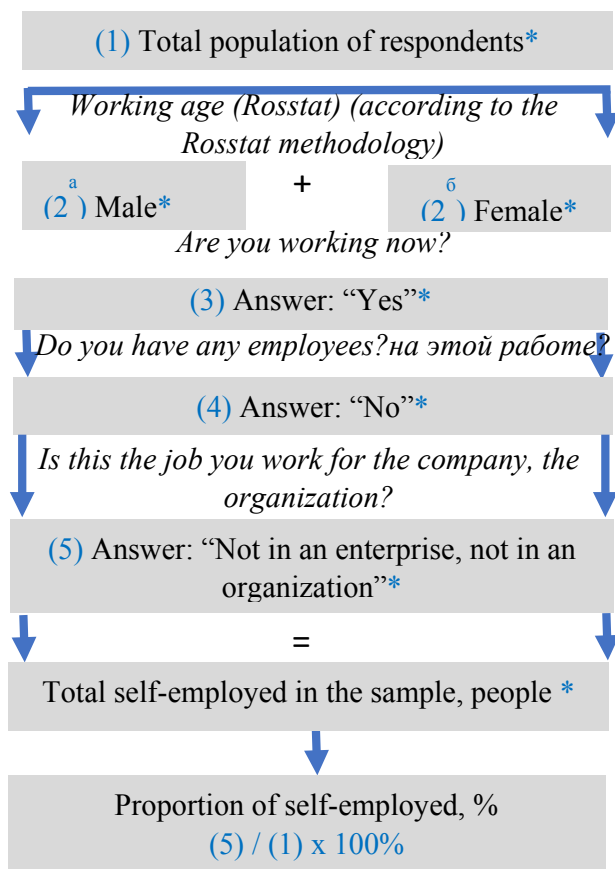
<sup>10</sup> The survey is carried out by the Research Centre “Demoscope” together with the Institute of Sociology RAS, Institute of Nutrition of the Russian Academy of Medical Sciences (to 2006), HSE University and University of North Carolina at Chapel Hill (USA) ongoing funding for the project is provided by HSE University. Project description. URL: <https://www.hse.ru/rlms/project>.

<sup>11</sup> OKZ — All-Russian Classification of Occupations.

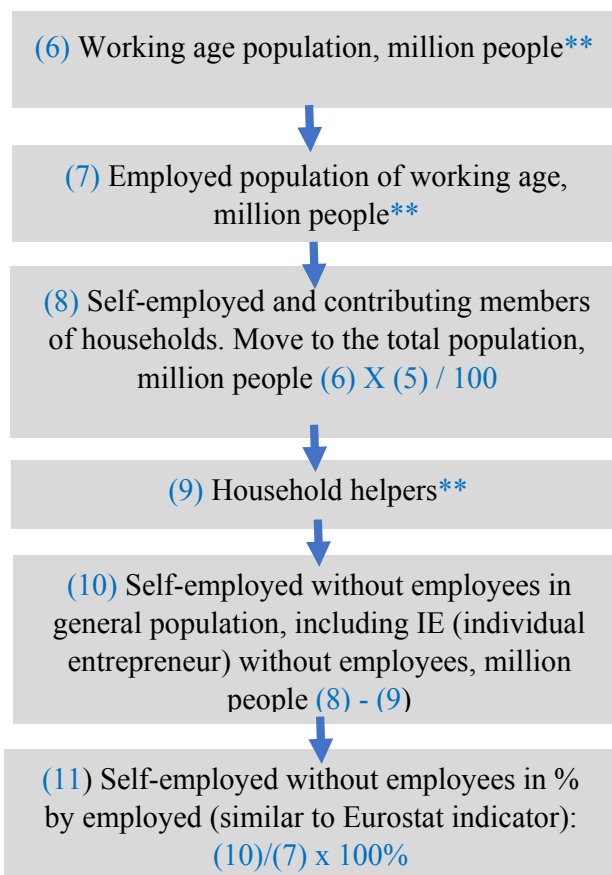
<sup>6</sup> Resolution on statistics of employment in the informal sector adopted by the 15th International Conference of Labor Statisticians (Geneva, 1993). Recommendations on the statistical definition of informal employment of the Seventeenth International Conference of Labor Market Statisticians (Geneva, 2003).



### I. Calculation of the share of self-employed without employees by microdata RLMS



### II. Transition to population totals according to Rosstat data



### III. Adjustment on registered IE without employees according to FTS and Rosstat

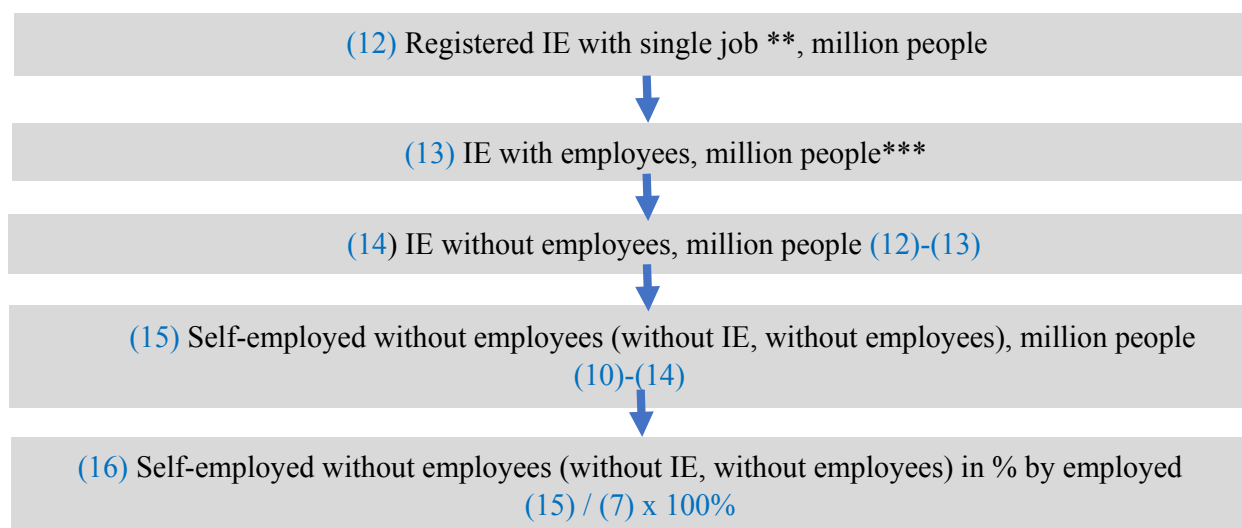


Fig. 2. Quantitative estimation algorithm

Note: \* – microdata RLMS; \*\* – OCR – microdata of Rosstat; \*\*\* – FTS data: the number of individual entrepreneurs working with cash registers is assumed to equal the number of entrepreneurs with employees [individual entrepreneurs without employees received a deferral to install such devices until 06/01/2021 (129-ФЗ dated 06/06/2019)].

Source: compiled by the authors.

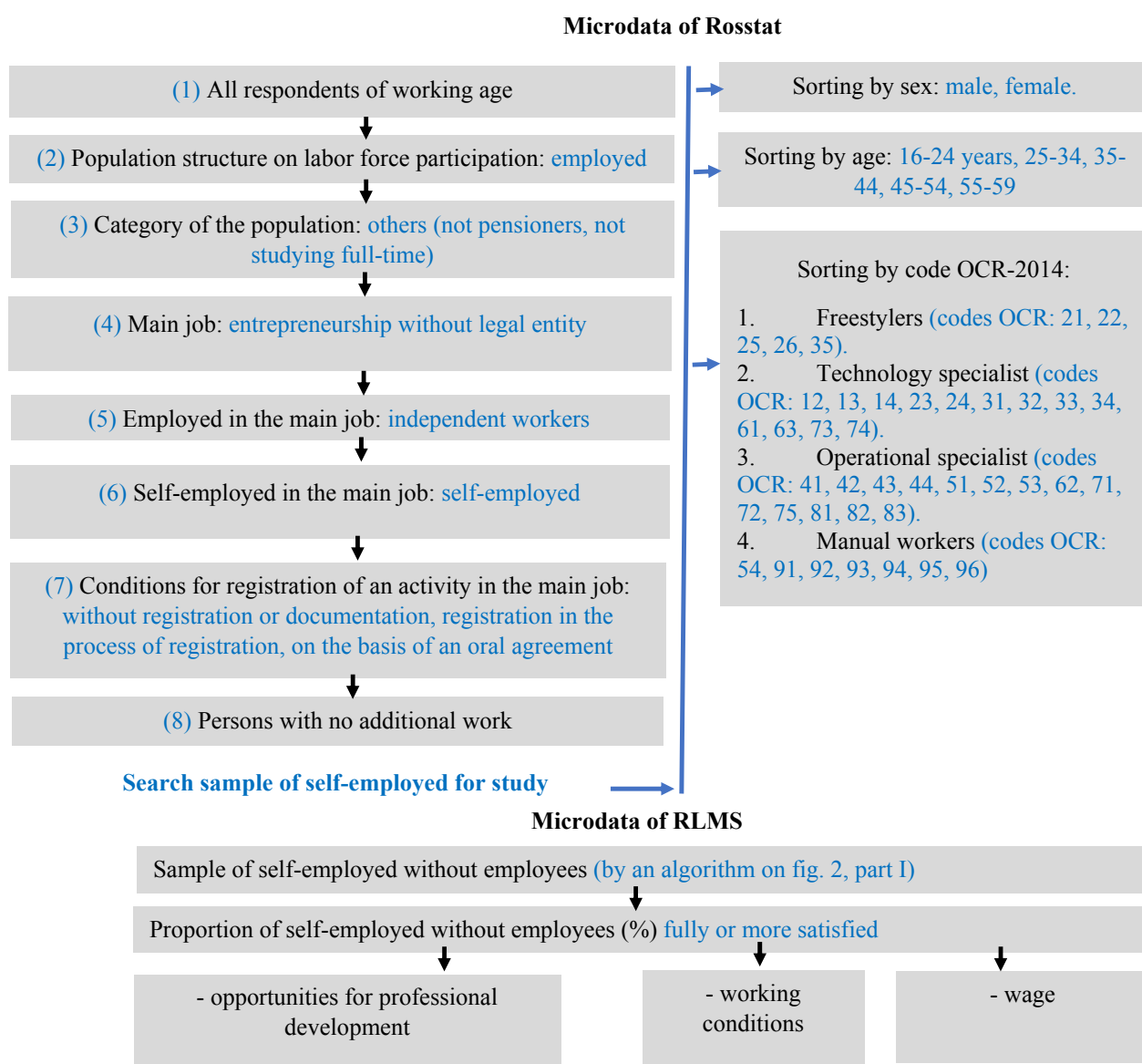


Fig. 3. Structural analysis algorithm

Source: compiled by the authors.

**(4) Analysis of self-employed income:** direct method of estimation from microdata of RLMS. Sample of self-employed — by these criteria (fig. 2). Distribution (%) — monthly income reported by respondents.

**(5) Estimation of income potential of the self-employed**

**(5.1) In the solidarity component:** the calculation of an insurance pension for a self-employed person who voluntarily entered into a legal relationship under compulsory

pension insurance is modelled (CPI) under the following conditions: continuous payment of a fixed minimum amount of contributions,<sup>12</sup> minimum contribution period (from 2025–15 years) and sum of individual factors (from 2025 r. — 30 years) (fig. 4).

**(5.2) In the cumulative component:** the developed **actuarial model** determines

<sup>12</sup> If the amount paid is less than the minimum length of service, a smaller period is counted (proportional to the contributions paid).



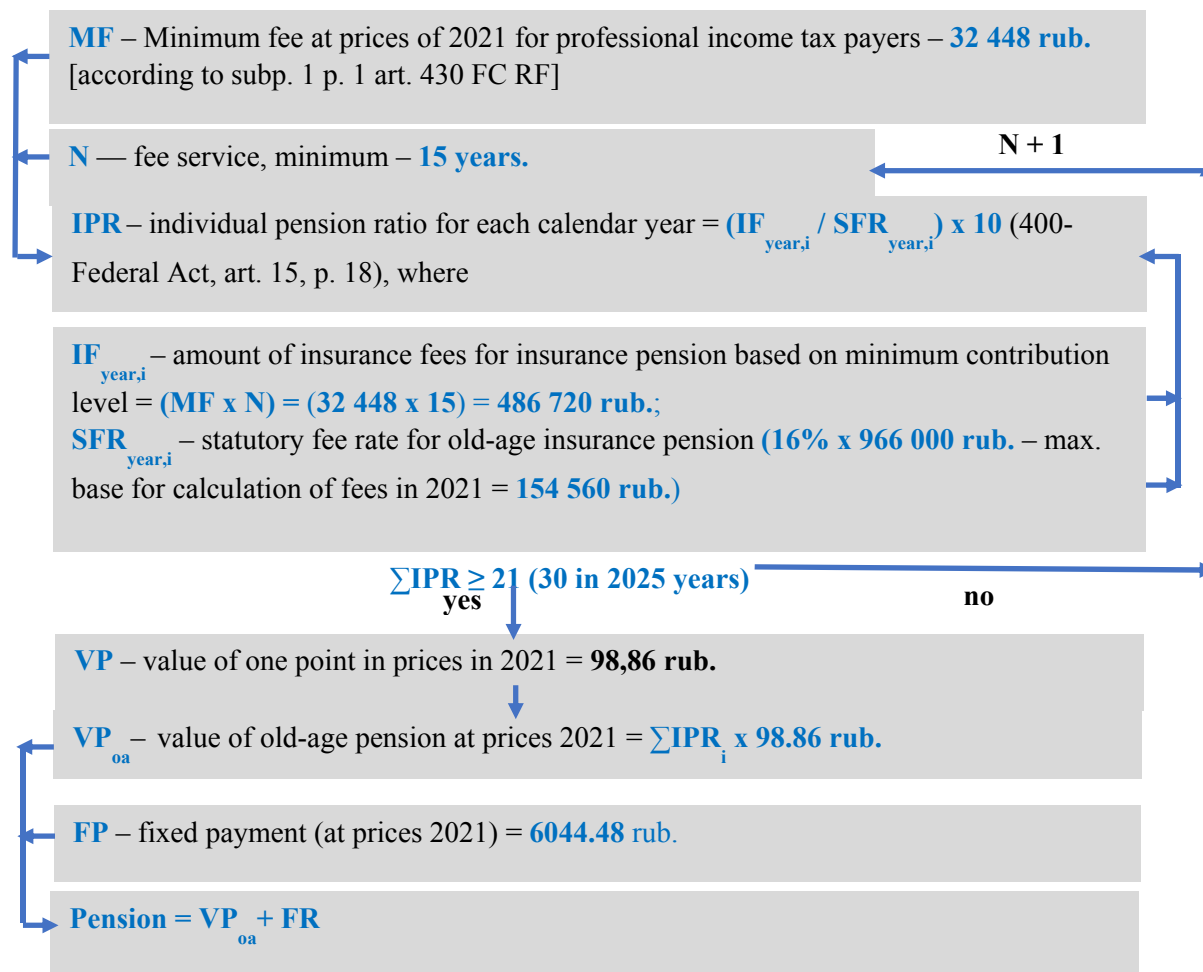


Fig. 4. Calculating algorithm for the self-employed old-age insurance pension

Source: compiled by the authors.

the amount of the cumulative pension, which would be determined by the self-employed person of the relevant age, income, size of contributions, period of regular payment up to 55 years (female), 60 years (male).

#### Model assumptions:

1. Simulated for early 2020 and projection period 2021–2061, excluding structural changes in self-employment.
2. The retirement age is 55 for women and 60 for men (similar to the current contributory system).
3. The amount of pension accrual depends on the amount of contributions for each individual with direct accrual of investment income in the individual account.

4. Assumes stability and continuity of contributions for the self-employed up to retirement age. Income is indexed to the projected rate of inflation and real income growth. Model parameters are presented in table 1.

The calculated amount of the old-age insurance pension (5.1) and the cumulative pension (5.2) is compared with the projected value of the social pension, [indexation to the inflation forecast, discounting on the investment rate of pension savings for 5 years (for insurance pension) and 10 years (for cumulative pension) (table 1), on reaching the age of retirement (70 years — for male and 65 years — female)].

#### (6) Forecast of the participation of self-employed persons in the system of



Table 1

## Actuarial model parameters

Model variation parameters:	Constant model parameters:
<ul style="list-style-type: none"> <li>– Investment strategy volatility;</li> <li>– Investment returns for actuarial calculations;</li> <li>– Average monthly income in rub. per month (with annual increase by projected growth rates of real wages and inflation);</li> <li>– Contribution rate (as a% of income);</li> <li>– Co-financing of the State, as a% of the fee;</li> <li>– Projected average social pension 2022–2061 (indexation of pension to forecast inflation (Ministry of Economic Development forecast followed by extrapolation to 2036), discounted for 10 years at risk-free rate</li> </ul>	<ul style="list-style-type: none"> <li>– official MED projections of inflation and real income growth according to the long-term socio-economic development baseline scenario of the MED of the Russian Federation to 2036r, extrapolated to 2063;</li> <li>– sex and age structure of the self-employed at the beginning of 2019, assumed to be unchanged;</li> <li>– Number of years remaining before retirement, i.e. the difference between the self-employed at the beginning of 2019 and the retirement age of the contributory pension (55 for female and 60 for male);</li> <li>– expected period of contributory pension – in art. 3, 424-Federal Act.</li> </ul>

Source: compiled by the authors.

**social pensions:** based on the demographic projection, the annual number of self-employed persons is projected by the movement of ages method, hence of the age structure established in 2019, to the age of receipt of a social pension.

**(7) Preparation of conclusions and recommendations:** Analysis of the possibilities of applying foreign experience in pension provision to Russian self-employed, selection of advanced instruments and mechanisms.

## RESULTS AND DISCUSSIONS

**(1)** According to the International Labour Organization (ILO), self-employed are independent workers who working in the informal sector on an individual basis without a permanent employer or permanent employees.<sup>13</sup> Self-employed are classified as belonging to informal sector and informal employment (non-registered, non-contributory).<sup>14</sup> Households are included into them.

<sup>13</sup> Resolution on statistics of employment in the informal sector adopted by the 15th International Conference of Labour Statisticians (Geneva, 1993).

<sup>14</sup> Recommendations for a statistical definition of informal employment 17 of the International Conference of Labour Market Statisticians (Geneva, 2003).

For Eurostat, self-employed are “owners of unincorporated enterprises that do not combine this activity with that of an employee. They include: helping family members in their own business belonging to one of the relatives, engaged in production for own consumption, both individually and jointly”.<sup>15</sup>

The concept of “self-employed” in Russia is shaped by the legalization of their activities as a group of persons not in informal employment with voluntary participation in pension insurance.

The result is a **working definition of self-employed for the Russian pension system:** self-employed individuals of working age in the labour force, those who work for remuneration in their main and only jobs for themselves (with or without civil contracts) in the business sphere, without employees outside the corporate sector. They do not include: persons who combine self-employment with other forms of employment; IE (pay taxes, insurance contributions); households.

<sup>15</sup> Eurostat Glossary: Self-Employed. URL: (<https://ec.europa.eu/eurostat/statistics-explained/index.php/Glossary:Self-employed#:~:text=A%20self%2Demployed%20person%20is,are%20considered%20to%20be%20employees>).





Table 2

## The number of the self-employed combined calculation method

I. Calculation of the share of self-employed without employees by microdata RLMS		
1	Working-age (man + woman), %	100.0
2	Proportion of self-employed persons in the working-age population, %	5.1
II. Transition to population totals according to Rosstat data		
3	Working-age population, million people	82.9
4	Self-employed without employees and contributing members of households with a transition to the total population, million people	4.2
5	Contributing members of households, million people	0.3
6	Total self-employed without employees, including IE, million people	3.9
7	Employed population of working age, million people	64.9
8	Self-employed without employees in % from the employed (Eurostat)	6.0
III. Adjustment for inclusion of registered IE without employees		
9	Registered IE with main single job**, million people among them	2.0
10	IE with employees, million people***	1.0
11	IE without employees, million people	1.0
12	Self-employed without employees (without IE), million people	2.9
13	Self-employed without employees (without IE) in % from the employed	4.5

Note: \* – microdata RLMS; \*\* – OCR microdata of Rosstat; \*\*\* – FTS data: the number of individual entrepreneurs working with cash registers are assumed to equal the number of entrepreneurs with employees workers [individual entrepreneurs without employees received a deferral to install such devices until 06/01/2021 (129-ФЗ dated 06/06/2019)].

Source: Quantification Algorithm (see fig. 2).

Table 3

## Distribution of working-age self-employed without employees by age and sex groups

Age, years	Man, %	Women, %	Man+Women, %
16–24	7.2	10.7	7.9
25–34	31.8	41	34.2
35–44	30.7	28.1	29.8
45–54	22.5	20.4	21.8
55–59	8.2	-	5.9
Total	100	100	100
All	72	28	100

Source: Rosstat LFS microdata, 2019.



Table 4

## Working-age self-employed professional groups

Nº professional sub-group on OCR-2014. Types of self-employed professions	%
<b>1 – Freelancers</b>	
26. Legal consultants, writers, journalists and linguists, etc..	2.3
25. Software, web and multimedia applications developers, database designers, etc.	1.2
21. Physicists, chemists, mathematicians (including actuaries), electrical engineers, architects, planners, designers, etc.	0.9
35. Technicians in ICT operations, ICT user support, computer networks and systems, etc.	0.5
22. Specialists in medical care, veterinary doctors, etc.	0.2
<b>Total for group 1</b>	<b>5.1</b>
<b>2 – Technology specialist</b>	
13, 14. Managers of business, personal subsidiary, etc.	4.4
61. Gardeners, landscape designers, zoo technicians, etc.	3.3
31. Electrical, electronic, mechanical, etc.	1.9
34. Sports workers, personal coaches, etc.	1.4
73. Tuners and restorers of musical instruments, jewelers, engaged in art crafts, etc.	1.3
23. Tutor teachers	1.2
33. Accountants, credit and insurance agents, brokers, etc.	1.1
74. Electronic equipment installers and repairers, etc.	1.1
12. Consultants in finance and accounting	1.1
63. Professional assistants in personal support farms	0.7
24. Financial analysts, appraisers, marketers, etc.	0.7
32. Family planning consultants, nutritionists, etc.	0.4
<b>Total for group 2</b>	<b>18.6</b>
<b>3 – Operational specialist</b>	
71. Builders, masons, carpenters and joiners, etc.	22.3
83. Private owners of automobiles, buses, working trucks and loading car, hinged power equipment, etc.	17.7
52. Traders, not registered as EI	9.0
51. Cooks, hairdressers, cosmetologists, domestic helpers and etc.	8.6
72. Welders, plumbers, fixers, mechanics, etc.	5.4
75. Seamstresses, shoemakers, woodworkers, etc.	3.7
81. Operators of machines for production of photographic, textile, fur and leather products, for processing of food products etc.	0.6
62. Hunters, fishermen	0.6
53. Child care workers, home care workers	0.5
82. Machinists – assemblers of machines, equipment etc.	0.3
41. Keyboard operators, text typers, etc.	0.2
43. Assistants in materials and transport inventory, etc.	0.04
42. Call-centre type employees	0.03
44. Hawkers and mail sorters, proofreaders etc.	0.02
<b>Total for group 3</b>	<b>69.0</b>
<b>4 – Manual workers</b>	
93. Collectors, recyclers and sorters of garbage, cleaners, etc.	3.0
92,96. Ancillary workers in construction, agriculture	4.0
91. Cleaners and servants in houses, apartment cleaners, house cleaners	0.2
54. Watchmen, guards for individuals, small businesses	0.07
94. Kitchen assistants, food manufacturers	0.05
95. Salesmen, car washers, valets, etc.	0.04
<b>Total for group 4</b>	<b>7.2</b>

Source: Microdata from the LFS of Rosstat at the beginning of 2019, classifier OKZ-2014.



Table 5

**Working-age self-employed without employees by income groups (after taxes and contributions)**

Income range, rub. per month	Share, %	Average income rub. per month
Up to 10 thous. rub.	10.6	7 844.1
From 11 to 20 thous. rub.	37.6	16 741.3
From 21 to 30 thous. rub.	28.3	26 889.0
From 31 to 40 thous. rub.	8.1	37 307.7
From 41 to 50 thous. rub.	4.7	48 533.3
From 51 to 60 thous. rub.	1.2	57 750.0
From 61 to 70 thous. rub.	0.9	67 000.0
From 71 to 90 thous. rub.	0.9	76 666.7
From 91 to 100 thous. rub.	0.3	100 000.0
More than 100 thous. rub.	1.2	142 500.0
Non-response	6.2	-
Total	100	-
Weighted average	-	25 623.4

Source: RLMS microdata base, 27th wave.

**(2) The current number of self-employed persons of working age in Russia** (as defined above) at the beginning of 2019 is estimated at **3 million people**. This represents 4.5% of all employed persons of working age (*table 2*).

The number of 3 million includes registered and unregistered self-employed persons of working age, non-IE. This is an unstable value. The composition and number of self-employed persons vary from period to period (including through the influx of employees registered by the IE), depending on the relative attractiveness of the tax benefits granted, the economic situation.

Using the (by comparison) approach of Eurostat, the number of self-employed in

2019 in Russia can be defined as 3.9 million people working age or **6.0%** employed population of working age. This is lower than in EU countries (in 2019–9.6%).<sup>16</sup>

**(3) Sex, age and professional composition of the self-employed** Russia and the EU are different. In Russia self-employment without employees — more “young” and with less participation of women. At the beginning of 2019, there were 75.4% of self-employed persons aged 25–49 and 62% in the EU.<sup>17</sup>

<sup>16</sup> Eurostat data. URL: <https://ec.europa.eu/eurostat/databrowser/view/tqoe4a3/default/table?lang=en>.

<sup>17</sup> The main results from the 2017 Labour Force Survey (LFS) ad-hoc module on «Self-employment». Eurostat. Self-employment statistics, 2018. URL: [https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Self-employment\\_statistics](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Self-employment_statistics).

Table 6

## Testing results of the actuarial model, man (selected information)

Monthly income	40 000 rub.		60 000 rub.		80 000 rub.	
Investment return, % annual / fee, %	% self-employed persons with a retirement pension > social	age, years	% self-employed persons with a retirement pension > social	age, years	% self-employed persons with a retirement pension > social	age, years
Without government co-financing						
5 / 3	0.0	0.0	3.4	16–22	14.5	16–27
5 / 6	14.5	16–27	41.7	16–35	58.4	16–40
10 / 3	0.0	0.0	3.4	16–23	14.5	16–27
With government co-financing (50% of fee)						
5 / 3	3.4	16–22	25.4	16–30	41.7	16–35
5 / 6	41.7	16–35	63.7	16–42	74.4	16–46
10 / 3	1.9	16–22	25.4	16–30	41.7	16–35

Source: compiled by the authors.

Proportion of self-employed women — 28% (*table 3*), in Europe in 2019–35%; in countries — 26–49%.<sup>18</sup> In Russia, in a group close to I-pros — 46%<sup>19</sup> women, as in the EU.<sup>20</sup>

**In Russia**, a low share of freelancers — 5% of self-employed persons without employees, in the EU — 47%.<sup>21</sup> Fewer technological specialist using professional knowledge of technology — 18.6%.  $\frac{2}{3}$  **self-employed** — operational specialist (69%) (*table 4*).

<sup>18</sup> Eurostat data ([https://ec.europa.eu/eurostat/statistics-explained/images/1/16/Shares\\_of\\_men\\_and\\_women\\_among\\_self-employed\\_with\\_and\\_without\\_employees%2C\\_aged\\_15-74%2C\\_2019\\_%28%25\\_of\\_total\\_self-employed\\_with\\_and\\_without\\_employees%29.png](https://ec.europa.eu/eurostat/statistics-explained/images/1/16/Shares_of_men_and_women_among_self-employed_with_and_without_employees%2C_aged_15-74%2C_2019_%28%25_of_total_self-employed_with_and_without_employees%29.png)).

<sup>19</sup> Joint remote exchange research FL.ru and HSE University based on surveys of 2 410 working freelancers. HSE University. Research Project “Freelance Census: Monitoring the Russian Language Remote Work Market (2009–2019)”. Noted that in 2009 there were twice as many men as women. URL: <https://www.hse.ru/org/projects/275856215>.

<sup>20</sup> The main results from the 2017 Labour Force Survey (LFS) ad-hoc module on «Self-employment». Eurostat. Self-employment statistics, 2018. URL: [https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Self-employment\\_statistics](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Self-employment_statistics).

<sup>21</sup> Freelancing in Europe. 2018 Survey. EFIP. Malta, 2018. URL: <https://news.malt.com/wp-content/uploads/2018/10/EFS-2018-Infographics.pdf>.

Core of Russian self-employment — construction workers (22.3% against 14% in EU<sup>22</sup>), and drivers and sellers (35.6%) (*table 4*). That is, the offer of standard works or services is distributed.

Less skilled manual workers account for 7.2% (*table 4*) with a lower share of self-employed workers in agriculture, forestry, fisheries — 5.6% (16.7% — in EU<sup>23</sup>).

**Self-employment** in Russia is **largely forced**. Satisfaction with conditions of work in 2019 was reported by 62% of the self-employed with no wage earners and by income level in total 35%. Slightly higher percentage of people with positive views on career opportunities — 41%. Eurostat estimated the rate of satisfaction of the self-employed in 82%.<sup>24</sup>

<sup>22</sup> The main results from the 2017 Labour Force Survey (LFS) ad-hoc module on «Self-employment». Eurostat. Self-employment statistics, 2018. URL: [https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Self-employment\\_statistics](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Self-employment_statistics).

<sup>23</sup> The main results from the 2017 Labor Force Survey (LFS) ad-hoc module on «Self-employment». Eurostat. Self-employment statistics, 2018. URL: [https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Self-employment\\_statistics](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Self-employment_statistics).

<sup>24</sup> See *ibid*.

#### (4) Income of self-employed persons in Russia is lower than in OECD countries.

The average income of the self-employed without employees at the beginning of 2019 (after taxes and contributions) was 25 600 rub. per month (*table 5*). 64% of the average wage of employees (in OECD countries in 2019–84% [6]). 85% self-employed received a monthly income less than 40 000 rub., 1,5% — more 90 000 rub. (*table 5*).

Most profitable industries — information technology, finance (average wage — 59 thous. rub. per month) — presented 2.2% self-employed.<sup>25</sup>

The working conditions of the self-employed in Russia are different: irregular working hours (49% — 8 hours per day, 19% — 10 hours, 15% — 12 hours<sup>26</sup>), income inequality and volatility in professional groups [20].

(5) Russian self-employed persons are not motivated to participate in pension insurance.

(5.1) With a minimum contribution level for 15 years, the self-employed will receive 31.5 points, equivalent to 3 114.1 rubles. With a fixed amount — 9 158.6 rub. (*fig. 4*).<sup>27</sup> Average social pension in 2021 (from 1 April) — 10 200 rub. Thus, even with a social pension five years later, a self-employed person would have a comparable pension

income without having to save for a future pension.

A. K. Solovyov presented similar conclusions on the insufficiency of the fixed payment for the insurance pension in the amount of one subsistence minimum of a pensioner (SMP). Self-employed person would need 121 years to complete 2.5 SMP.<sup>28</sup> [21]

(5.2) Funded schemes, even with regular contributions from 16 to 20 years of age at the rate (3 per cent) from 40 000 rub. to retirement age, will not provide a pension greater than the social pension, indexed and developed at the time of receipt of the funded pension (*table 1*) no potential participant (*table 6*). The increase in the contribution rate from 3% to 6% makes it interesting to create pension savings for 11.7% of the total number of self-employed persons aged 16–27 (man). Persons over 40 can only be covered by the cumulative insurance scheme if their income has doubled (*table 6*).

Co-financing by the State of 50% of the contribution makes it appropriate to participate in the funded pension insurance for all persons from 16 to 22 years of age with income 40 000 rub. per month. With regular contributions up to 59 years of age, they will receive a cumulative pension more social.

(6) 3 million self-employed persons without employees — is 4.5% employee and 2.7% individual personal accounts maintained by the PFR (Pension Fund of the Russia) (no pensioners).<sup>29</sup>

The number of self-employed persons reaching the age of social pension is projected to increase from 63 thous. in 2030 to 1.3 million by 2055. By 2040, the social pension

<sup>25</sup> Calculations based on microdata RLMS, 27th wave. Sample of self-employed without employees (*table 3*). Question from the questionnaire: “How much money have you received in the last 30 days at your main job after deduction? If you received all or part of the money in foreign currency, transfer everything to rubles and name the total amount”.

<sup>26</sup> Calculations based on microdata RLMS, 27th wave. Sample of self-employed without employees (*table 3*). Question from the questionnaire: “How many hours and minutes on average do you continue your normal working day in this job?”.

<sup>27</sup> If the amount of the insurance pension, taking into account other amounts of material security, is less than the amount of the pensioner’s subsistence minimum established in the region or in Russia (detailed calculation is set 178-Federal Act, art. 12.1), social pension supplement is provided. In 2021, the subsistence minimum for a Russian pensioner was 10 022 rub.

<sup>28</sup> Calculated according to conditions 2019.

<sup>29</sup> At the beginning of 2019: 3 million — estimated number of self-employed without employees, 155.3 million — total number of individual personal accounts, 43.9 million — number of pensioners (Open data PFR. URL: <http://www.pfrf.ru/opendata/>).

Table 7

**The number of the self-employed without employees at retirement age for a social pension forecast**

Year	Man. 70 years and over, thous. people		Woman. 65 years and over, thous. people		Man + Woman, thous. people		Social pension, thous. rub. per month	Social pension payments, bln. rub.
	Without mx*	With mx*	Without mx*	With mx*	Without mx*	With mx*	F**	F**
1	2	3	4	5	6	7	9	11
2030	35.2	29.2	35.2	33.4	70.4	62.6	14.38	10.8
2035	220.4	137.2	220.4	188.1	440.8	325.3	17.50	68.3
2040	473.2	228.2	473.2	390.1	946.3	618.3	21.29	158.0
2045	753.2	279.6	753.2	596.9	1506.5	876.5	25.90	272.4
2050	1082.8	318.7	1082.8	792.1	2165.6	1110.8	31.51	420.0
2055	1466.0	351.4	1466.0	932.5	2931.9	1284.0	38.34	590.7

Note: mx — mortality rate; F-forecast.

Sources:

Columns 2, 4 — tab. 2.3.

Columns 3, 5 — the number of self-employed people corresponding to age, adjusted for the mortality rate by the age-shifting method (The Human Mortality Database, Russia, 2014. URL: <https://www.mortality.org/cgi-bin/hmd/country.php?cntr=RUS&level=one>).

Column 6: Column 2 + Column 4. Column 7: Column 3 + Column 5.

Column 8 — open data of the FIU.

Column 9 — forecast of social pension, base — 2021, 2022 and further — indexation to the inflation index projected by the Ministry of Economic Development with subsequent extrapolation (Forecast of socio-economic development until 2036).

Column 10 — (column 8 × column 7) / 1000 (in billion rubles).

Column 11 — (column 9 × column 7) / 1000 (in billion rubles).

for the self-employed will amount to an additional 50% for all social pensions in 2019.<sup>30</sup> (table 7).

## CONCLUSIONS AND RECOMMENDATIONS

For the Russian pension system, self-employed persons without employees of working age are significant. When their quantitative estimates are similar to those of other countries, differences are found in structural characteristics: forced, low percentage of freelancers — 5% (in EU — 47%); less women, younger self-employed; low incomes [64% of average wage earners (in OECD — 84%)].

<sup>30</sup> According data by PFR, in 2019, the number of recipients of social pensions amounted to 3.2 million people, the average amount of social pension — 9.3 thous. rub. per month, expenditure on social pensions — 357 bln. rub. a year.

All this with the guarantee of a social pension (which is quite large) renders the participation of the self-employed in both the insurance and the funded pension system without prospects.

In international practice, 3 approaches to self-employed pension schemes have been identified [1]:

- compulsory participation of the self-employed in the public CPI system, together with and on equal terms with employees;
- the same, but on concessional terms;
- voluntary participation of self-employed persons in various pension schemes.

Russia has not yet implemented any of these approaches.

International experience has shown that the compulsory participation of the self-employed is effective at income levels beyond that of wage earners. Inclusion of low-income



self-employed persons in general distribution schemes reduces average pension [1].

The provision of benefits in general schemes (reduced tariffs, tax deductions, exemption from fees, etc.) does not significantly improve the coverage of self-employed persons. Nor it is confirmed (at low incomes) that the success of differentiating the architecture of pension systems at the expense of multiple private and occupational pension schemes has been achieved.

There has been a gradual phasing out of special pension schemes by occupation (farmers, artisans, traders, liberal professions); differentiation of insurance rates and contributions according to various criteria (income, age, length of service, etc.) [1].

Solution for Russia — **recognizing that there is no alternative to voluntary pension insurance for self-employed persons**; to create a **base for increasing payments** as welfare increases and the legalization of the self-employed. Because of the above analysis and taking into account established international practice, the following promising instruments and mechanisms for involving the self-employed in pension insurance can be identified:

**1. Careful application of mandatory elements and targeted inclusion of selected prospective categories:**

- obligation of a person in any employment status to participate in a pension insurance scheme of choice.<sup>31</sup> That all — free entry and exit, with the possibility of paying contributions either independently or by third parties; with the right to choose — under which pension scheme to retire, with the possibility of converting one pension scheme to another;
- orientation of the private funded pension scheme towards the interests of the younger generation, actively using information

<sup>31</sup> For example, employees, registered sole proprietors, private practices after changing status to self-employment will be obliged to make a choice: a CPS or a voluntary funded scheme.

technologies and willing (according to numerous surveys) to form pension savings with relative freedom of disposal, with the use of mobile financial technologies for obtaining information and managing pension accounts (choice of trustee, pension fund, change of pension plan, choice of tariff, management of part of savings etc.).

**2. The principle of expanding the status of participants** in pension insurance is important. Should not be limited to a narrow group of registered self-employed.<sup>32</sup> Both self-employed and near-self-employed persons not covered by pension insurance are considered.<sup>33</sup>

**3. In Russia, more incentives are provided by forms of State support (savings schemes).** That's:

- state guarantees to protect 100% of savings (possibly with a guarantee of 1–2% of investment returns) to make the savings scheme more attractive than guarantees on bank deposits within a bank for the duration of the contract;
- co-financing by the State of a part of the fee (possibly with a limit on the maximum amount).

The latter instrument is highly cost-effective, given the potential reduction in the cost of future social pensions. Actuarial model calculations for the group of men (*table 6*) shows, that, with co-financing from the State, 1.5 out of 3% of the contribution at income 40 000 rubles self-employed men, with the established gender and age structure of self-employment, will earn 5 rubles for co-financing costs savings on social pension payments (adjusted to present value).

<sup>32</sup> Current regularization schemes do not cover all self-employed occupations.

<sup>33</sup> Close to self-employed insured persons are persons employed in the household (homemakers), students, volunteers (if willing to pay fees by other family members), unsigned employees (informal workers), persons engaged in household production for sale, helping family members in their own business belonging to one of the relatives.



It is possible to grant the right to form a cumulative pension on the basis of full (conditionally “1.5% + 1.5%”) or partial (conditionally “1% + 0.5%”) schemes.

It is possible to establish State participation not from the first year but, for example, from the fifth year (for the full scheme) or from the tenth year (for the partial scheme). Another option is State participation for the first 5–10 years.

4. Each country involves the self-employed in pension systems by **designing specific products**. All countries create resources for citizens to understand the prospects of participating in the programme: information platforms, online calculators, visualization tools (infographics, brochures, multiplied videos, etc.). This enables the self-employed to understand all the nuances and risks of participation in pension schemes, without “going deep” in financial knowledge. Similar ideas in the part of creation of “calculator of pension rights” for the self-employed are contained in the works of A.K. Solovyev. [21]

5. The interaction of information systems, databases of Bank of Russia, PFR and pension funds, creation of central pension administrator, client big data, increase of operational ability (models, actuarial calculations, forecasts) is very important.

6. The following mechanisms are promising in pensions for self-employed persons (from international practice [1]):

- minimum income threshold below which there is no payment or compulsory participation (in case of employment) in at least one pension scheme (for example, at 1 MW);

- maximum income threshold after which no pension insurance payments are collected (for example, at 30 MW);

- exemption from tax and other payments within 2 years of registration with pension insurance;

- tax deduction (in whole or in part);

- joint accumulation of pension by spouses (family account);

- various types of bundles with other insurance payments (temporary disability, maternity, loss of provider, etc.); minimal linkage in terms of tariffs and the mechanism of recovery and payment;

- the right to early (early) withdrawal; the right to late withdrawal; the right to voluntary supplements for the purpose of increasing the pension, etc.;

- additional retirement benefits [lump-sum, holiday (e.g., Christmas) etc.];

- exemption from insurance payments during special periods of life (pregnancy and post-natal leave, etc.).

Thus, it is important for Russia to use the maximum of these approaches in order to create a beneficial regime for the self-employed, to provide incentives for them to “get out of the shadows”, to prevent mass withdrawal from the pension system.

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