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# Opportunities for Improving Financial Provision of Social Insurance Institutions in the Russian Federation

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## ABSTRACT

The **subject** of the research is the analysis of priority directions of improvement of financial provisioning of activity of extra-budgetary funds of the Russian Federation that make up the system of social insurance institutions. The **purpose** of the study is to develop active and passive opportunities to improve the activities of the institution of social insurance, allowing to increase the level, stability and volume of insurance contributions to extra budgetary funds by improving the quality of the internal financial environment in certain types of economic activity, in particular "Manufacturing". The **relevance** of the topic is confirmed by the fact that in recent years, the share of insurance contributions in revenues of social insurance institutions does not exceed 65%, i.e. in terms of the insurance mechanism, the budgets of social insurance institutions are deficit. Therefore, financial and economic solutions are required to improve the financial situation of social insurance institutions and stabilize their activities, including through intensive methods to encourage the activity of contribution payers to increase the rate base and reduce non-payments. The **scientific novelty** of the study lies in the development of author's algorithm of forming the financial security program of social insurance institutions, combining active and passive opportunities, including financial instruments of solvency of economic entities. The main methods of the study include the method of content-analysis, tabular and graphical methods, analysis and synthesis as universal methods of scientific knowledge, as well as methods of effectiveness assessment. As a **result** of the study the basic elements of the program of improvement of financial maintenance of institutes of social insurance, including, in particular, offers on formation of passive possibilities at the expense of realization of measures of financial support from Government of the Russian Federation and active support at the expense of inclusion of actions in branch development strategies. And also recommendations are given on the inclusion of proposed measures in the activities of authorities and adopted sectoral strategies, including on the basis of the distribution of powers between the executive authorities and other interested parties on the basis of normative legal acts.

**Keywords:** social insurance; financial security; insurance contributions; economic activity; solvency; incentives

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## INTRODUCTION

As we have already indicated in our previous research, “for the financial support of the activity of the institutions of pension, social and medical insurance the Government of the Russian Federation on the basis of legislative acts regulating legal relations in the field of social insurance, establishes the rates of insurance premiums as a percentage of the wage fund, which must be paid by insured persons. Currently, the general rate of social contributions is 30%, of which 22% goes to the Pension Fund of Russia, 5.1% — to the Compulsory Medical Insurance Fund, 2.9% — to the Social Insurance Fund of the Russian Federation” [1].

The Government of the Russian Federation also sets limit amounts for each insured person, which are awarded individually. Thus, in accordance with the procedure established by the Order of the Government of the Russian Federation No. 11407 from 06.11.2019, “from 1 January 2020, the maximum value of the base for the calculation of insurance contributions for the Pension Fund of Russia is 1 292 000 rub., the Social Insurance Fund — 912 000 rub., for the Federal Fund of the CMI no limit amount”.<sup>1</sup>

The assignment of a specific type of economic activity to a certain class of economic activity is regulated by the Rules, which are approved by a resolution of the Government of the Russian Federation. On the basis of the Rules, the Ministry of Labour and Social Protection of the Russian Federation develops and issues an order “On approval of classification of types of economic activity by professional risk classes”.

At present, insurance contributions for compulsory social insurance account for more than 1/3 of the Russian Federal budget and more than 7% of GDP. For comparison: insurance premiums (contributions) for all voluntary insurance contracts concluded with

individuals, for 2018, amounted to less than 1% of GDP. Thus, at present, the activity of insurance institutes in the Russian Federation is quite an important segment of the national economy [2].

At the same time, there are strong imbalances in the sectoral structure of financial support for the activities of these institutions [3]. As a result of the imbalance, there is an objective need to develop appropriate measures to support those economic activities that are key donors to these funds [4]. That is, there is an objective need for a detailed analysis of the sectoral structure of the financial provision of social insurance to develop measures of targeted state support for the relevant types of economic activity and to stimulate the conditions for maintaining Stability of the entire social security system in the Russian Federation.

## LITERATURE REVIEW

A lot of attention in Russian and foreign sources is paid to issues of increasing the effectiveness of social insurance institutions. In particular, the analysis of the main features and most important features, as well as parameters of the current state of the pension insurance system in Russia were considered in detail in the work of D. S. Tulenty with colleagues [5]. In particular, the paper highlighted significant features inherent in solidarity pension relations in modern Russian society.

In turn, A. L. Safonov and Yu. V. Dolzhenkova analyze the Russian economy to identify the factors of financial imbalance of the mandatory pension insurance system [6]. According to the authors, the most important condition for balancing the pension insurance system is to resolve the question of tariff sizing to ensure stable financial security of the social insurance system. We agree with the opinion of A. L. Safonov and Yu. V. Dolzhenkova that the tax approach can be used to meet the requirement of sufficient resources in the insurance process.

<sup>1</sup> Order of the Government of the Russian Federation No. 1407 from 06.11.2019 “Limit on the basis for the calculation of compulsory social insurance contributions for temporary incapacity for work and maternity and for compulsory pension insurance as from 1 January 2020”.

Interesting is the opinion of A.K. Solov'ev, which allocates the most important problems of management of social insurance institutions in Russia [7]. In our view, the system of criteria for evaluating the performance of the social security system deserves special attention, in general. The targeted approach proposed by A. K. Solov'ev can be considered as a doctrinal direction in the process of the overdue adaptation of relations between all stakeholders in the Russian social insurance system.

The distribution of responsibilities between the levels of State administration of the social insurance system does not remain without attention. For example, the work of I. B. Kotlovskii with colleagues rightly raises the issue of increasing the potential of domestic regional parametric insurance programs, which have a high impact in the context of the delegation of some social functions from the federal center to the regions and to the field [8].

It is important to consider that the scientific problem of reforming and adapting the social insurance system is not new. Issues of introduction of innovations in domestic insurance practice are considered quite regularly during the last decade. For example, N. Savvina has sufficiently substantiated the importance of the continuous innovation development of domestic insurance in a dynamic changing financial environment, including, globally [9].

The objective of improving the resources for the activities of insurers and the insurance system as a whole is considered from a variety of perspectives. In our view, specific consideration should be given to proposals for the establishment of supranational funds and a system of relations to ensure payment in the context of active inter-country labour and post-labour migration. I. Yarygina proposes to use specialized inter-state credit institutions to solve this problem [10].

In addition to credit facilities, professionals are actively proposing investment model approaches. For example, E. A. Zvonova

with colleagues proposes to improve the effectiveness of institutions promoting investment in the sustainable growth of the national economy in order to create additional financial opportunities for economic entities, used to increase insurance premiums and reduce dependence on other sources of financing. The authors believe that only by optimizing the activities of institutions promoting investment in the sustainable growth of the Russian economy can the prerequisites for increasing the sustainability of the social insurance system be created [11].

Scientific trends in foreign research are aimed at analysing the expansion of the social insurance system and its extension to informal, including self-employed workers. This direction is in demand in the context of the development of information technology, remote work and the appearance of a large number of persons involved in the solution of private tasks. Due to the fact that these persons enter mainly short-term relations with the employer, there is an objective obstacle to the formation of a meaningful fund for their insurance coverage. A. Kolev and J. La offer special mechanisms to expand the properties of the social insurance system to solve this problem [12].

Special attention is paid to the reallocation of State resources for safety to the most vulnerable categories of citizens. In particular, C. Schmitt and colleagues are proposing appropriate methods for assessing needs and decomposition of social categories to ensure the required level of social protection by the state [13].

Thus, the scientific problem posed is quite relevant, but it requires additional analysis in terms of ensuring the sufficiency of the resources used for the uninterrupted and ineffective functioning of the Russian social insurance system, aimed at achieving the objective of social protection of the population.

## MATERIALS AND METHODS

As the basic data of the study materials of official statistics, data on activities

of individual enterprises and economic activities, as well as data from open sources, were used. The basic methods of research were tabular and graphical methods, analysis and synthesis, as well as methods of average, forecasting and contextual analysis of the legal framework. The methodology of the research is based on the generally accepted postulates of economic theory, as well as the publications of other authors in the subject area under consideration. In particular, the modern international principles of individual insurance are considered, as well as the role of certain types of economic activity in the resource provision of activities of social insurance institutions in modern conditions.

## RESULTS AND DISCUSSION

The financing of social insurance institutions in the Russian Federation at present cannot be called purely insurance. Assets of extra budgetary fixed assets are formed not only from contributions of insured persons, but also from budget transfers. Thus, in the activities of social insurance institutions there is a constant "insurance" deficit.

This is evidenced by the combined financial indicators of social insurance institutions over the past few years (*Fig. 1*). This situation leads to the conclusion that the financial provision of social insurance institutions with the use of insurance mechanisms (through the contributions of insured persons) needs to be significantly improved [14]. It is recalled that total contributions can be increased in three methods:

- 1) by increasing the unit rate of contributions (insurance tariff);
- 2) by increasing the tariff base, i.e. by increasing the overall wage fund;
- 3) by improving the financial condition of economic entities and reducing defaults in funds.

And, in our opinion, the first method can significantly worsen the already rather difficult financial situation of economic entities, as it will lead to an unjustified increase in labor costs. We therefore suggest

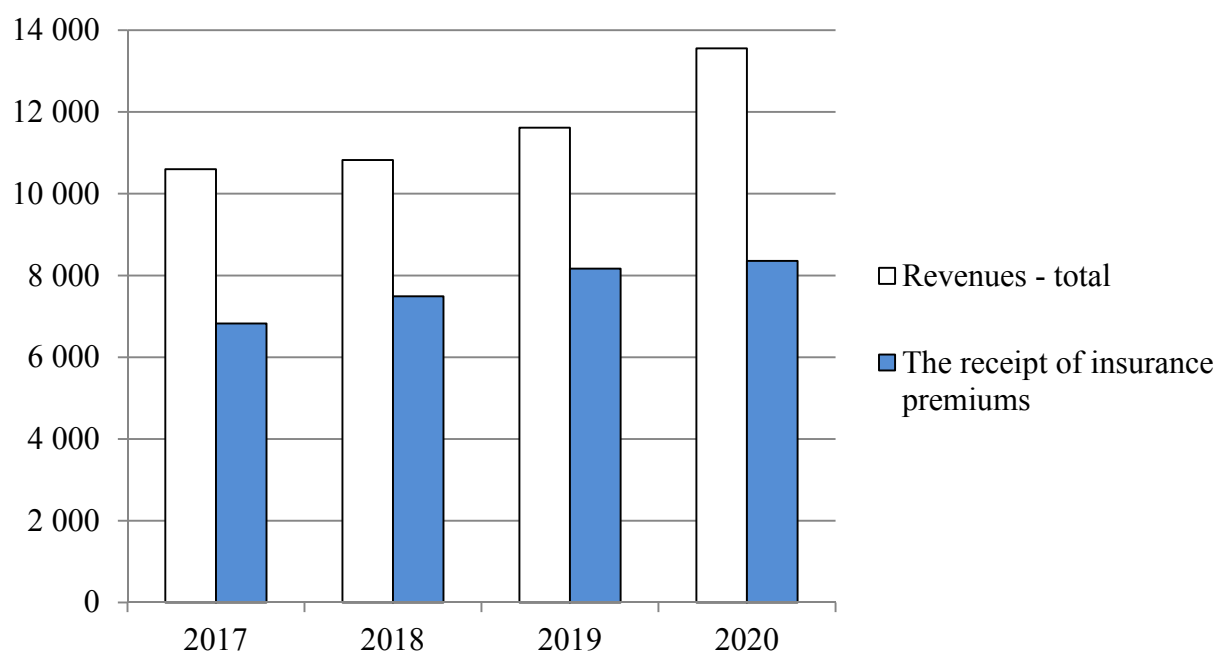
that the efforts of stakeholders should focus on the second and third methods.

To this end, it is important to understand what are the main sources of financial security, and what are the opportunities for stakeholders to improve financial security [15]. By stakeholders in the problem we mean the following categories of social insurance participants:

- the State as the main regulator of relations and the indirect beneficiary of the national social insurance system as a whole;
- social insurance institutions as recipients of funds from enterprises and organizations and as distributors of those funds for the compensation of social services to the population;
- enterprises and organizations as payers to the social insurance system;
- owners of enterprises and organizations as persons, at whom financial interest is due to withdrawal of funds from the turnover of the entities of economic activity belonging to them;
- employees of enterprises and organizations in which social protection is the subject of social insurance institutions;
- population indirectly using social insurance institutions to meet their social needs.

To this end, it is worth considering a number of important structural indicators on the basis of which conclusions can be drawn about priority actions of stakeholders to stimulate the growth of financial security of social insurance institutions, offered by M.A. Miryukova and V.F. Sokolova [16]. In particular, the issue of the sectoral structure of financial security is important.

A quantitative analysis of the structure of insurance premiums shows that, at present, of the 18 types of economic activity for which statistics are kept in the Russian Federation, the major part of insurance funds (about 80%) is taken into account pay only six types of economic activities (*Fig. 2*). The figure shows that among the listed economic activities a relatively high proportion of insurance premiums is "Manufacturing industries" —



**Fig. 1. Dynamics of the main financial indicators of the social insurance institutions of the Russian Federation, billion rubles**

Source: summarized by the author on the basis of federal laws on the execution of budgets of social insurance institutions.

27.4%; “Transportation and storage” — 14.2%; “Wholesale and retail trade, repair of motor vehicles” — 13.1%.

The leading place in the structure of insurance premiums of the type of economic activity “Manufacturing industries” is due to its high proportion in the turnover structure (25.36%) and in the labor costs (26.01%). By type of economic activity “Wholesale and retail trade, repair of motor vehicles”, which has a higher volume of turnover (37.51%) and average annual number of employees (19.10%), and share of insurance premiums is 2 times less than that of manufacturing. This is due to the lower level of pay per employed person (115.6 thous. rub.) than in manufacturing enterprises (297.03 thous. rub.).

If we consider the amount of payments per person employed in an economic activity, we can also identify several leaders whose payments are significantly higher than the national average (Fig. 3). As shown in figure, with a large margin of lead “Mining operations” — 223.72 thous. rub./per. In second place is “Provision of electrical energy, gas, steam, air conditioning” — 135.53

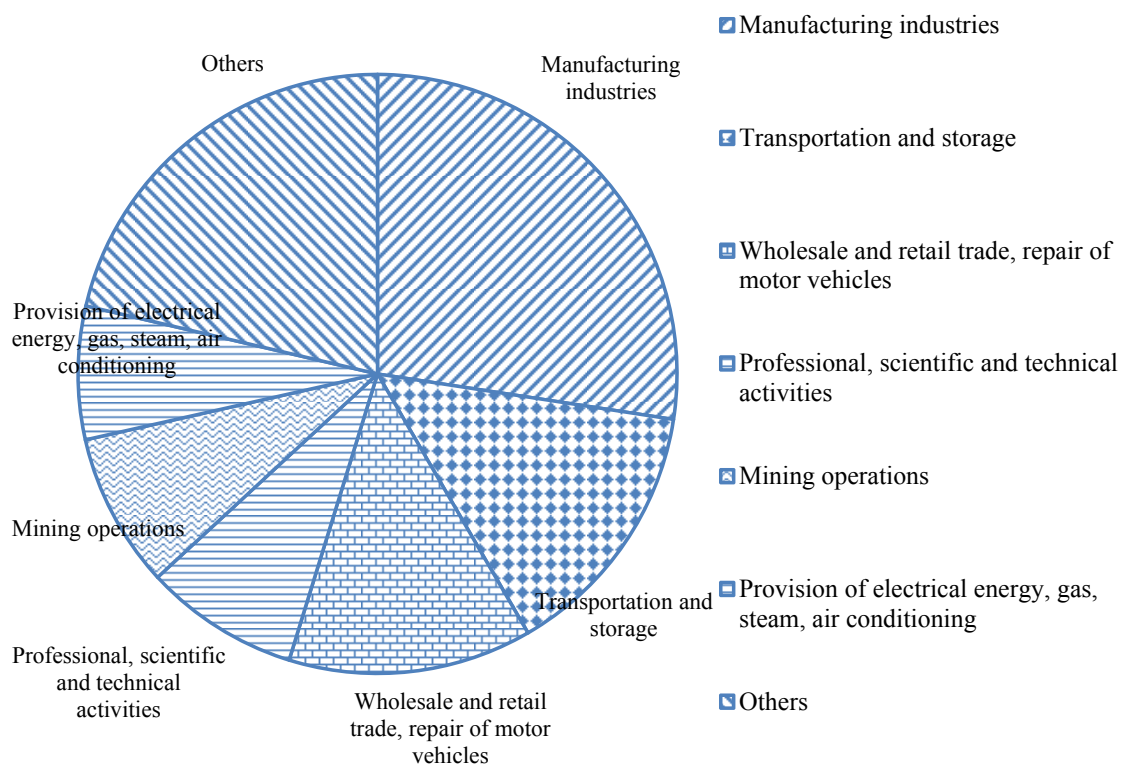
thous. rub./per. Other types of activities show relatively high stability of payments with values of about 85 show relatively high demonstrate stability of payments with values of about 85 thous. rub./per. Payments in other economic activities, that not shown in the figure, isn’t exceed the average [17].

It can be concluded from the data provided that in the Russian economy there is a situation in which there are types of economic activities that contribute most to the resourcing of social insurance institutions. In our view, such economic activities require additional support from the State to stimulate their further development as donors of social protection system.

To this end, it is advisable to establish an appropriate algorithm of actions allowing stakeholders to coordinate their actions to ensure the sufficiency of resources allocated to the social insurance system (Fig. 4). In our opinion, the general type of algorithm should take into account different options and sources for detailing support measures.

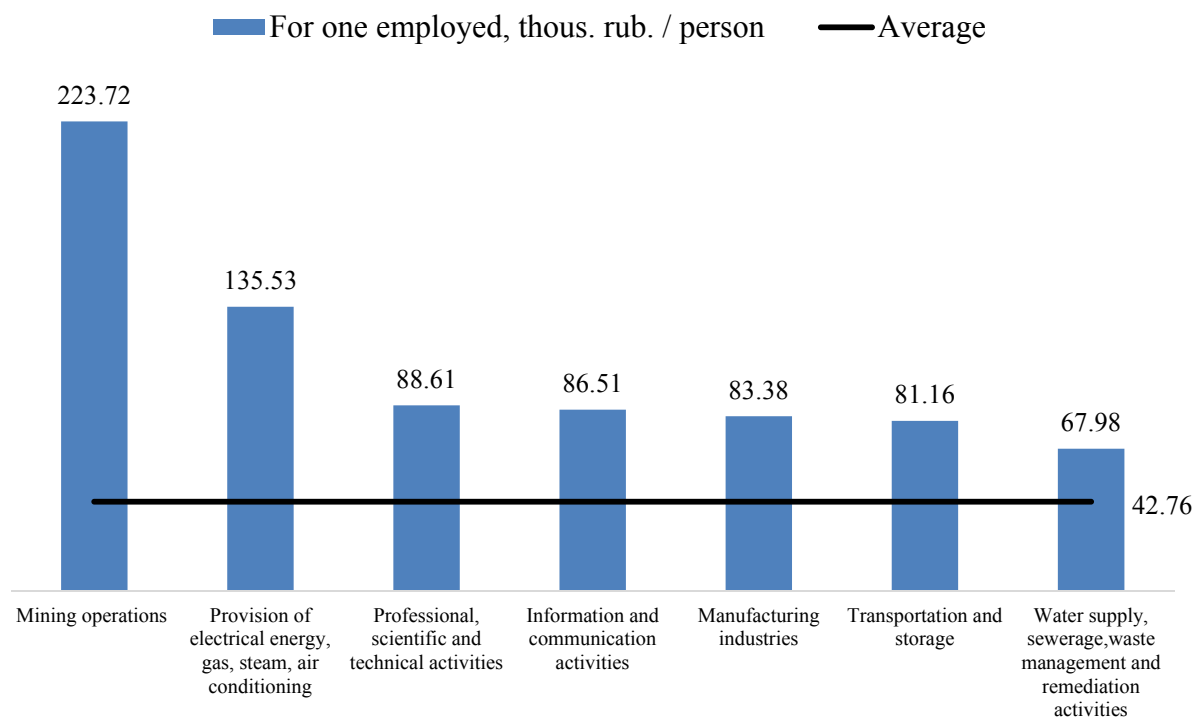
Consider the possibility that arise from the analysis of the state of individual





**Fig. 2. Share of contributions to the social insurance fund by type of economic activity**

Source: Rosstat: 1) data are given for the main type of activities of organizations, excluding the activities of financial organizations; 2) without small businesses.



**Fig. 3. The amount of payments to the social insurance fund by type of economic activity per employee**

Source: built by the author based on Rosstat data.

economic activities in Russia. With regard to options for creating passive opportunities for improving the financial security of social insurance institutions, it is important to understand that all incentive measures are usually implemented within the framework of favorable conditions for doing business and reducing negative impacts on the business environment [18].

Expert assessments indicate that “total expenditure of early pensions and other compensatory payments for special working conditions is on average 6–8% of the wage fund in industry, and for selected industries and regions — 20–40% or more” [19]. This practice, on the one hand, has a very negative impact on the competitiveness of domestic products in the world market, and on the other, significantly reduces the resources allocated by society to old-age pensions [20–22].

Federal law No. 250 from 03 July 2016 “On amending the certain legislative acts...”, the functions of the insurance premium administrator were transferred to the tax authorities. This was the result of the Decree of the President of the Russian Federation No. 13 from 15 January 2016 “On additional measures to strengthen payment discipline in payments with the Pension Fund of the Russian Federation, the Social Insurance Fund of the Russian Federation and the Federal Medical Insurance Fund”.

This measure is actively “implemented” by representatives of international financial organizations with the aim of reducing employers’ costs in the field of payment of compulsory payments. However, in most developed countries with compulsory social insurance, including Germany, in order to ensure close cooperation with employers in the assessment and payment of insurance premiums, the administration of insurance premiums is carried out by the Social Insurance Administration [23–25]. The evolution of the debt situation of organizations of certain economic activities on payments to government extra budgetary

funds (at the end of the year) is according to data from *Table 1*.

Official statistics allow us to conclude that for the period from 2017 to 2019, the arrears in payments to government off-budget funds for all types of economic activity increased from 344.5 to 382.8 bln rub., of which 42.7 bln rub. — it is amounts to arrears. To assess the scale of the debt, we note that its amount for 2019 almost tripled the need for financial provision of compulsory social insurance against industrial accidents and occupational diseases (128.3 bln rub.).

The analysis shows that the increase in the non-payment of insurance premiums occurred for most economic activities other than construction, real estate operations and public administration. A positive result is the reduction in total overdue accounts payable, which decreased from 14.7% in 2017 to 11.1% in 2019 [26]. However, it has increased markedly: this applies to culture (more than 4 times growth); mining (13.4% growth) and trade (2.3 times growth).

The share of arrears in payments to government extra budgetary funds by type of activity “Manufacturing production” at the end of 2019 was 12.4%, which exceeded the average for all activities — 11.1%. That is, there is an objective gap between total payments and accumulated debt, the reduction of which is one of the most important possibilities for improving the financial security of social insurance institutions in the current conditions [27].

In our opinion, the growth of accounts payable on insurance premiums payments to government extra budgetary funds — this is not only and not so much the result of the transition to the new system of administration of insurance premiums. We consider that the reasons of this phenomenon are related in the market economy to the efficiency of management of all factors of production, including current assets or working capital. Consider a number of important prerequisites of the current situation in more detail.

One of the criteria of efficiency of management of working capital of an

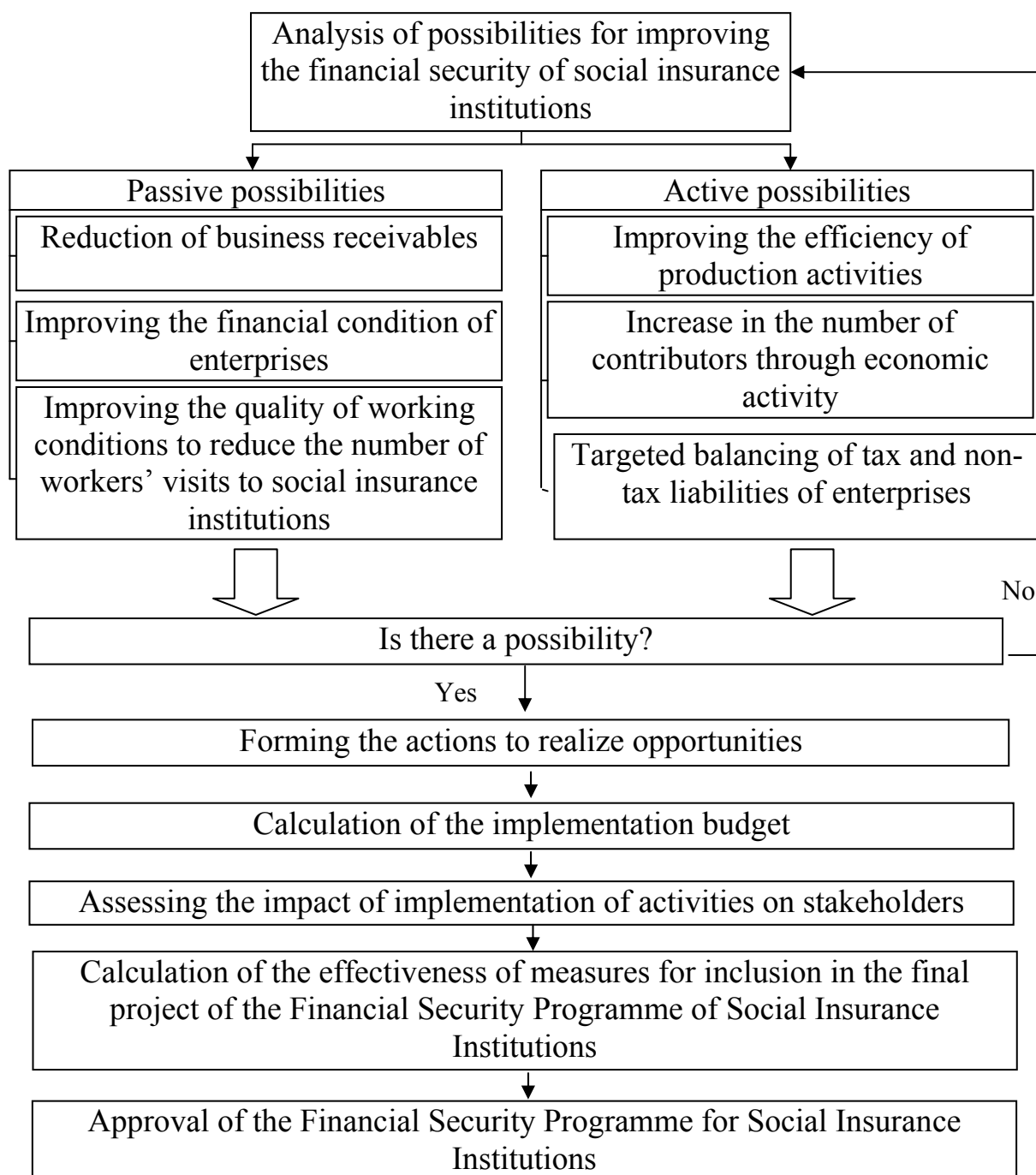


Fig. 4. Algorithm for the formation of the Program of financial support of social insurance institutions

Source: developed by the author.

enterprise is the amount of receivables of buyers, including arrears [28, 29]. The presence of such arrears signals the risk of late repayment of funds and their depreciation due to inflation. This occurs when the supplier of the goods does not pay attention to analyse the financial situation of potential buyers of the products, optimize the payment for the

goods and services provided, identify the reasons for the delay in payment in a timely manner and prosecute the debtors [30].

Ultimately, the creation of uncontrolled buyers' receivables undermines the financial sustainability of the contributor. Therefore, the analysis of accounts receivable by type of economic activity is an important element



Table 1

**Dynamics of arrears on payments to off-budget funds by certain types of economic activity**

Economic activities	2019	2017
Water supply, sewerage, waste management and remediation activities	34.65%	34.80%
Manufacturing industries	12.38%	15.68%
Wholesale and retail trade, repair of motor vehicles	1.65%	0.95%
Financial and insurance activities	1.33%	0.98%
Information and communication activities	0.68%	0.75%
Public administration and provision of military security	0.66%	6.55%
Accommodation and food service activities	0.33%	0.99%
TOTAL	11.15%	14.72%

Source: Rosstat: 1) data are given for the main type of activities of organizations, excluding activities of financial organizations; 2) without small businesses.

of managing the resources of insurance institutions. For example, *Fig. 5* shows that total receivables for all economic activities exceeded 50 trn rub., of which 46.4%, or about 23.5 trn rub. — it is the buyers' accounts receivable.

This means that the own funds of organizations — producing goods, works and services are in the economic circulation of buyers and are at risk of non-recovery and loss of their original value due to inflation. In comparison, insurance premiums forecast twice exceed in the Pension Fund of the Russian Federation, the Social Insurance Fund of the Russian Federation and the Federal Compulsory Medical Insurance Fund (11 499.1 bln rub.), provided by federal laws for 2019.

The existence of the risk of non-recovery or late return of receivables by buyers is evidenced by the data on the presence of its arrears, the size of which amounted to the results of 2019–1897.2 bln rub., and exceeded insurance contributions to the Federal Compulsory Medical Insurance Fund (1862.2).

Among the listed economic activities, a significant amount of the buyers' receivables was "Manufacturing industries" 6470.9 bln rub., or 42.8% to total buyer's debt. At the

same time, more than 400 bln rub. or 6.2%, there was a arrears.

The analysis of the arrears on the payments of insurance premiums to the social insurance funds showed that it was caused not only by the formation of late receivables of buyers, as mentioned above, but also insufficient economic efficiency of enterprises and organizations. This is evidenced by the level of return on assets, sales and losses incurred by enterprises for 2019.

Summarizing the overall situation in the manufacturing industry, it should be noted that according to officially published statistics, for 2019, a loss of 1 937.8 bln rub. was received for all types of economic activity, and share of loss-making organizations more than 26%.<sup>2</sup>

Considering active opportunities, we believe that the main source of stimulation of financial activity is the development strategies by economic activity. These documents are adopted at the level of the relevant authorities and are intended to create legal conditions for increasing business activity in the production of certain products, works or services.

<sup>2</sup> See, for example, source: Rosstat "Russia in Figures". Official Edition. 2020.

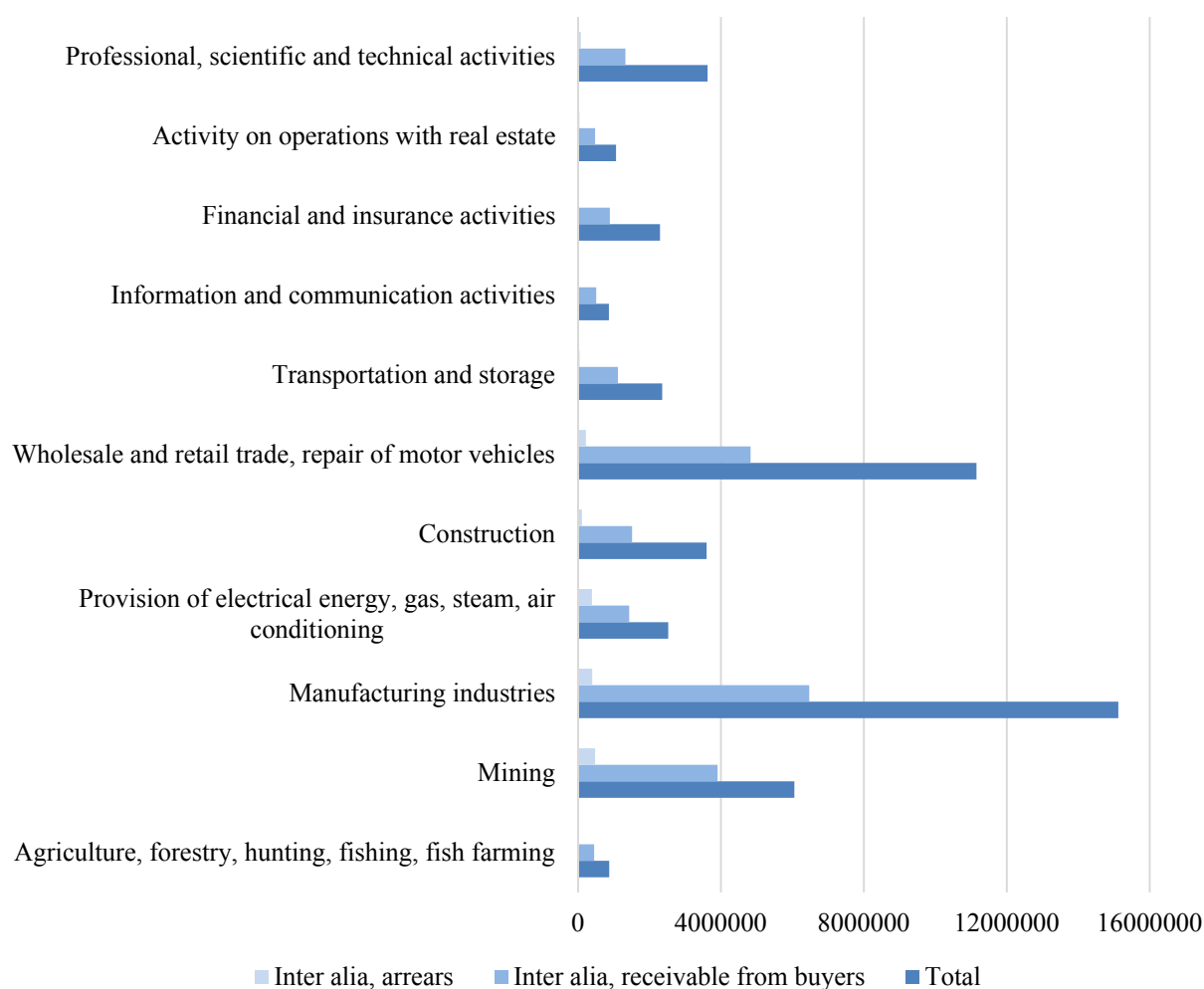


Fig. 5. Structure of accounts receivable of enterprises by type of economic activity

Source: Rosstat "Russia in Figures". Official publication. 2020.

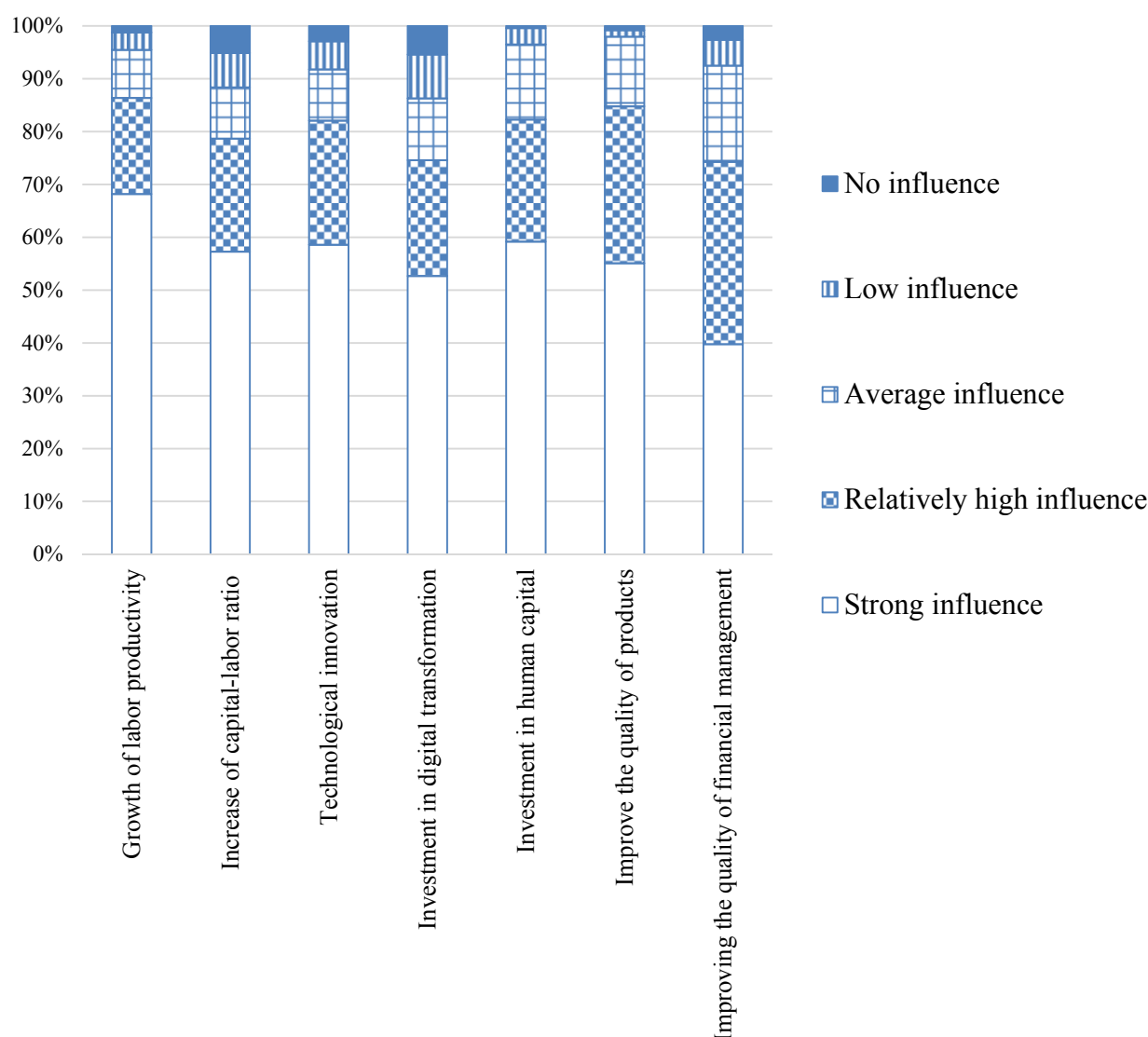
In particular, in the Decree of the Government of the Russian Federation No. 1512 from 06 June 2020, on the approval of the Consolidated Strategy for the Development of the Manufacturing Industry of the Russian Federation to 2024 and until 2035, emphasizes, that "at the present stage, the activity of the manufacturing industry is intended to contribute not only to the development of the industrial potential of the country, but also to increase the flexibility to respond to threats in the field of economic, environmental and biological security".<sup>3</sup>

Generally, however, the strategies adopted do not reflect the real needs of enterprises

to create the conditions for improving the business environment. For example, our survey among the heads of enterprises belonging to the type of economic activity "Manufacturing industries" allowed to identify the key factors, which, according to the respondents, most likely to improve the efficiency of current industrial production (Fig. 6).

Based on the results obtained it is possible to conclude that the most significant factor, according to the respondents (sum of the answers "Strong influence" and "Relatively high influence"), are factors "Productivity growth" — 86.4% respondents, "Improve the quality of products" — 84.8% respondents, "Investment in human capital" — 82.3% respondents, and "Technological innovation" — 82.1% respondents. The

<sup>3</sup> Decree of the Government of the Russian Federation No. 1512 from 06 June 2020 "Consolidated Strategy for the Development of the Manufacturing Industry of the Russian Federation to 2024 and until 2035".



**Fig. 6. Results of a survey on the importance of factors that ensure the efficiency of production activities of enterprises of the type of economic activity "Manufacturing"**

Source: built by the author based on the results of his own surveys.

importance of other factors is between 74.3 and 78.7%.

Thus, it can be concluded that in the current conditions of development of the Russian economy productivity is a key indicator of efficiency of social production [20]. Nevertheless, relatively low labor productivity in Russia (Fig. 7) does not allow the domestic economy to successfully compete in manufacturing with the leading countries [32].

Information on the dynamics of growth (decrease) of labor productivity by the main types of economic activity of the Russian Federation (in % from the previous year) in the period from 2015–2018 is presented on Fig. 8.

From the data shown in the figure, that since 2016, there has been a positive trend in the rate of productivity growth — by the results of 2018 for all economic activities the growth rate was 102.8 points by 2017. The exception is the economic activity "Manufacturing industries", where in 2018 there was a significant decline in the rate of labor productivity growth.

As is known, the main and decisive condition for increasing the rate of productivity growth is the full development and improvement of the means of labour. Living labour becomes more productive when it widely uses high-performance machines, equipment, instrumentation and working

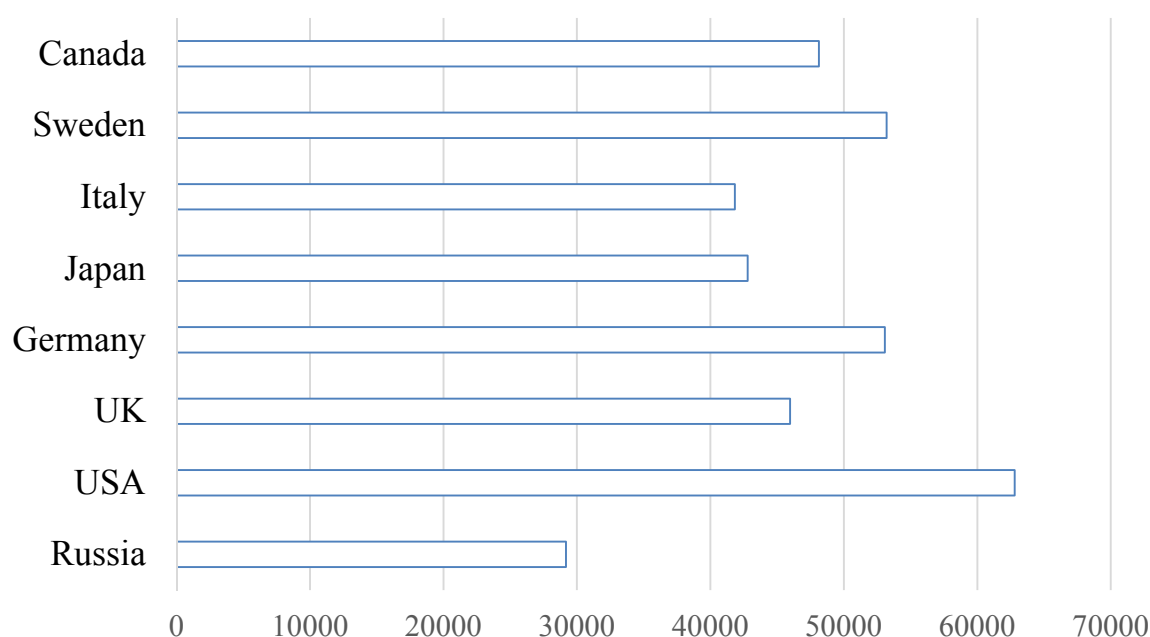


Fig. 7. Labor productivity at purchasing power parity in US dollars

Source: compiled by the author based on data from the statistical offices of the respective countries.

tools. Of particular importance is the renewal of productive assets, the timely replacement of obsolete means of labour with more productive ones.

It should be noted here that the manufacturing industry does not have the domestic financial resources to renew the means of labour. Practice shows that many businesses and organizations are finished with negative financial results in 2019. As a result, the industry has a high credit burden and a significant working capital deficit. On the basis of the conducted analysis, it is advisable to formulate a number of important results and record the existing opportunities for improving the financial security of social insurance institutions in Russia (*Table 2*).

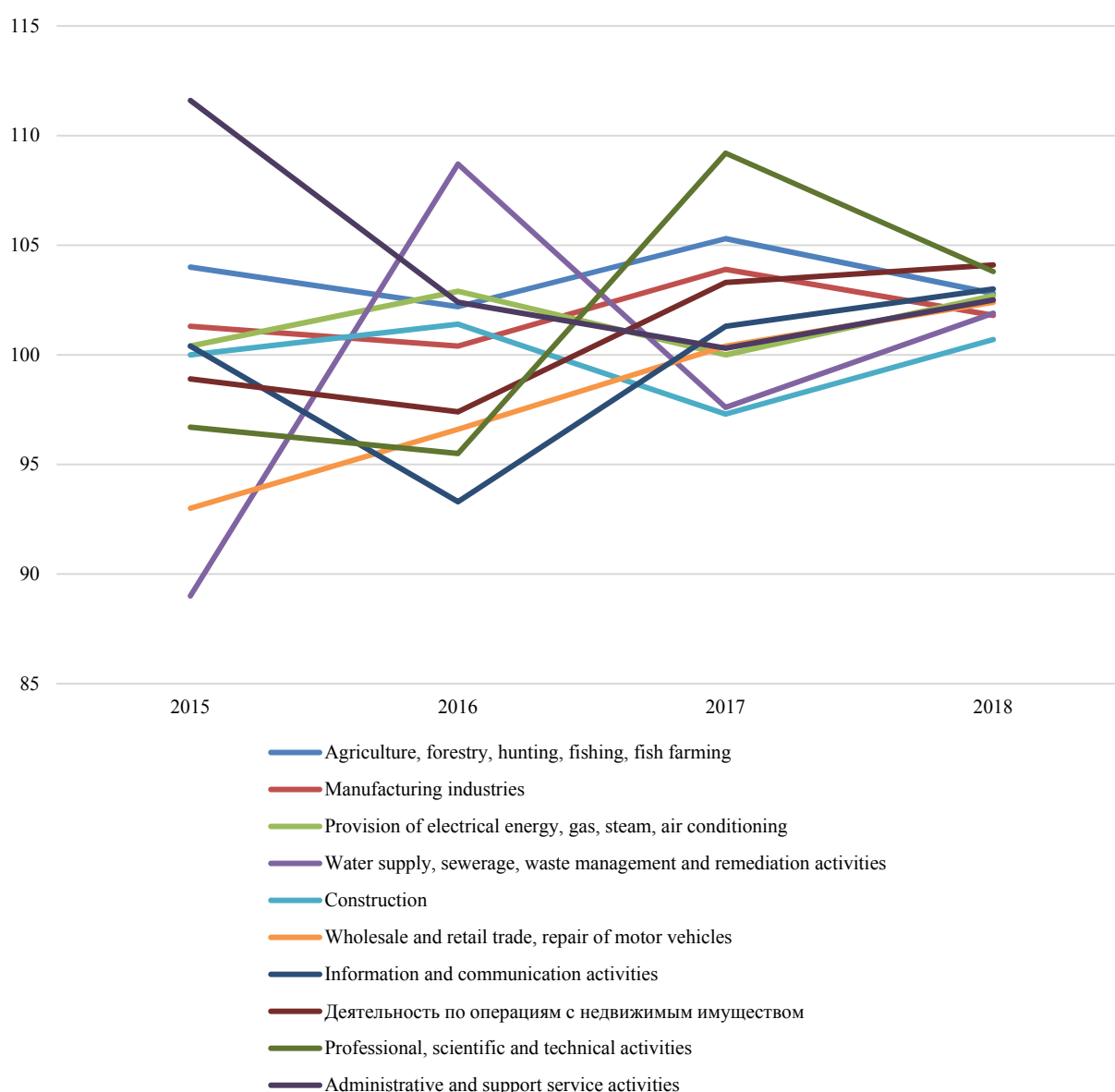
From the *Table 2* shows that, according to the most cautious estimates, the most likely to improve the financial condition of enterprises in the long term. Improving opportunities in the short term is not feasible. Therefore, in our view, available opportunities must be taken very cautiously. To this end, it is advisable to use an appropriate methodology for evaluating the effectiveness of activities. To develop the methodology, consider a number of important concepts and assumptions:

- Estimated activity — short-term non-typical set of actions or works aimed at obtaining a given result. Measures are the single object of the effectiveness evaluation, within the framework of the Financial Security Program of Social Insurance Institutions.

- Budget to carry out the activities — a set of cost items, as well as monetary estimates of these items, which amount to the cost of a specific short-term non-typical set of actions or works. Allows to estimate the amount of financial provision required for the implementation of the Program as a whole, as well as its individual stages, blocks and sections.

- Impact of the event on stakeholders — for the purposes of the research the increase in the amount of payments of an individual enterprise, a group of enterprises, and the type of economic activity in the system of social insurance institutions.

Based on the *Table 2* it is advisable to highlight those opportunities that will be most effective in terms of research, i.e. the greatest increase in payments to social insurance institutions. In our view, it is advisable to consider opportunities with the lowest probability, as other opportunities are already



**Fig. 8. Dynamics of labor productivity by type of economic activity in the Russian Federation**

Source: Rosstat "Russia in Figures" official publication 2020.

included in sectoral strategies [33, 34]. Thus, the priorities for the design of the stimulus are:

- business accounts receivable reduction;
- targeted balancing of tax and non-tax liabilities of enterprises;
- increasing the number of contributors through the development of economic activities.

As the analysis of the specialized literature has shown, the problem of evaluating the effectiveness of stimulating the possibilities of financial support for the activities of social insurance institutions is practically

not considered. Given the authority of the stakeholders and the decomposition of the Programme by main categories of participants, several sets of activities arise. In this case, the general form of the effectiveness evaluation formula ( $Ef_{MSII}$ ) will be as follows:

$$Ef_{MISS} = \frac{\sum_{i=1}^I Et_i}{\sum_{i=1}^I \sum_{j=1}^J C_{ij}}, \quad (1)$$

where  $Ef_{MSII}$  — effectiveness of measures for social insurance institutions;  $Et_i$  — effect (increase of payments to the system of



Table 2

**Assessment of opportunities for improving the financial provision of social insurance institutions**

	Short-term period	Medium-term period	Long-term period
Reduction of accounts receivable	No probability	The probability is average	The probability is high
Improving the financial condition of enterprises	The probability is low	The probability is high	A reliable event
Improving the quality of working conditions to reduce the number of workers' visits to social insurance institutions	The probability is low	The probability is average	The probability is high
Targeted balancing of tax and non-tax liabilities of enterprises	No probability	The probability is low	The probability is average
Increase in the number of contributors through economic activity	No probability	No probability	The probability is low
Improving the efficiency of production activities	The probability is low	The probability is low	The probability is average

Source: developed by the author based on an analysis of industry strategies.

social insurance institutions) from the implementation of the  $i$ -activity;  $C_{ij}$  — cost of the  $j$ -th interested party for the implementation of the  $i$ -activity within the Program.

The effects are estimated on the basis of general statistics on payments to the social insurance institution system, so it is estimated as the aggregate growth of income of social insurance institutions. If sufficient information is available, further factor analysis of the increase in payments is warranted. No such statistics are currently available, so the estimation is based on probability parameter to evaluate. With this approach, formula (1) takes the following form:

$$Ef_{MSII} = \frac{\sum_{i=1}^I M(Et_i)}{\sum_{i=1}^I \sum_{j=1}^J M(C_{ij})}, \quad (2)$$

where  $M(Et_i)$  — mathematical expectation of effect (increase of payments to the system of social insurance institutions) from

the implementation of  $i$ -activity;  $M(C_{ij})$  — mathematical expectation of costs of the  $j$ -th interested party for the implementation of  $i$ -activity within the Program.

In order to quantify effectiveness, it is advisable to formulate a preliminary list of activities for each opportunity identified. In our opinion, the following activities are in demand:

*Possibility 1* — reduction accounts receivable of enterprises:

Activity 1.1 — creation of bill chains to detect defaults under the guarantee of a reliable issuer (Vnesheconombank, Sberbank, VTB and others);

Activity 1.2 — active use of judicial procedures to enforce debt repayment;

Activity 1.3 — Formation of state-owned nodes in payment chains for interim targeted debt.

*Possibility 2* — targeted balancing of tax and non-tax liabilities of enterprises:

Activity 2.1 — amending tax legislation to reduce federal tax payments for bona fide contributors in social insurance system;

Activity 2.2 — general reduction of taxes on new property to release funds for current payments to social insurance institutions.

*Possibility 3* — increase the number of contributors through the development of economic activities:

Activity 3.1 — introduction of investment tax holidays for newly established enterprises and organizations for a period of up to 3 years, followed by a rolling change in property taxes;

Activity 3.2 — amendment of tax-exempt legislation for the period of return on investment for enterprises that produce products and are a priority for the implementation of the national import substitution programme.

Obviously, this list of activities is not exhaustive, but contains the most relevant proposals for the revitalization of the economic activity “Manufacturing industries”, therefore requires appropriate cost and impact assessment. In our opinion, it is advisable to estimate the costs of each activity separately, and as an example we will consider the costs of only one interested party — the State.

The costs of other stakeholders may also be estimated with some assumptions, but to demonstrate the viability of the methodology, the valuation data appear to be redundant and require additional labour cost beyond the scope of this article. However, the estimation of the mathematical expectation of the cumulative effect is possible but will not be fully reliable due to the probabilistic nature of the approximate calculation.

The estimation of the State’s expenditures on the measures is made taking into account the main results of the Russian economy’s financial activity during the past periods. Under this approach, the cost of activity 1.1 could amount to up to 2% of the total amount of overdue accounts receivable — this is the average value of the bank’s financial performance guarantee. On the basis of *Fig. 5*, we can conclude that the preliminary estimate of the cost of Activity 1.1 are 129417.72 mln rub.

Practice shows that the cost of judicial proceedings is up to 1.6% of the total value of

disputed amounts. That is, for the interested parties of the activity “Manufacturing industries” this sum as the cost of the Activity 1.2 will amount to 103534.18 mln rub.

In turn, the provision of State-owned nodes in the default chain is cost-free, however, allocation of target subsidies to intermediate arrears may be up to 135888.61 mln rub., i.e. the cost of financing Activity 1.3. Thus, the total maximum amount of expenses for the financing of activities for the implementation of the Possibility 1 will be 368840.50 mln rub., which in comparison with the revenue of the federal budget for 2021, is 1.96%.

In reality, however, it is not possible to implement all activities within one year, so it is advisable to divide this cost by 3 years, which may be required to implement these activities nationwide. Then the annual costs will amount to 122946.83 mln rub., which is comparable to the total amount of payments of a given economic activity to the system of social insurance institutions.

If we consider the complete elimination of defaults in the system of social insurance institutions as an effect of the realization of Possibility 1, the evaluation of the annual efficiency under this assumption will be:

$$Ef_{MSII} = \frac{13300}{122947} \times 100\% = 10.82\%$$

This level of efficiency seems to be high enough for the State’s efforts to improve the financial security of social insurance institutions. Similar to the example given of probabilistic evaluation of the effectiveness of measures, if Possibility 1, tax activities may also be evaluated. As a cost to the State is the amount of tax revenue, and as a result — growth in payments as a share of the emerging aggregate wage fund.

The use of probability categories allows account corrections on assumptions and correct the estimates for future years, increasing accuracy for stakeholders. In our opinion, this approach is currently the most appropriate in terms of planning and

forecasting the financial parameters of social insurance institutions.

### CONCLUSION

1. The main financial indicators of the income of social insurance institutions have been negative for a number of years — share of insurance contributions of total income not exceeding 65%. This means that additional measures are needed to stimulate the activities of insurers in order to reduce the level of actual debt on insurance premiums and to raise the tariff base.

2. One of the main positions in the structure of insurance contributions to State off-budget insurance funds occupies the type of economic activity “Manufacturing industries”, which is due to the priority of enterprises and organizations of this type in the turnover of goods, works, services and labor costs.

3. However, the manufacturing industry has currently significant arrears to social insurance institutions owing to weaknesses in financial management, high depreciation of

fixed assets and the use of costly technologies in production.

4. For such economic activities as “Manufacturing industries”, that contribute most to the financial protection of the population from social risks, is requires the renewal of the state technological, investment and financial policies and the large-scale involvement of innovative industrial institutions in the modernization of the existing economic mechanism.

5. It would also be necessary to entrust a person, who decision makers on industrial policy in Russia, including specialists from the Ministry of Industry and Trade of the Russian Federation, the Ministry of Finance of the Russian Federation and the Federal Tax Service of the Russian Federation, are develop, together with social insurance institutions, an algorithm of actions to put manufacturing industry on a trajectory of financial sustainability and stabilization of solvency, using tools, contained in the Order of the Government of the Russian Federation No. 1512 from 06 June 2020.

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