ORIGINAL PAPER



DOI: 10.26794/2304-022X-2022-12-4-63-75 UDC 362.2(045) JEL O15, H12

Financial and Economic Risks Management in Russian Health Care System

B.I. Trifonov

Plekhanov Russian University of Economics, Moscow, Russia

ABSTRACT

Nowadays, the society faces with financial and economic risks which play a special role in the diversity of risks. In the most general form, they affect the amount of available financial resources that can meet the current needs of the population and spread new living standards. The purpose of the study is to analyze the affection of financial and economic risks on social growth and to develop recommendations for creating a mechanism for managing them in the Russian health care system. For this goal achievement, the author has identified several tasks clarifying the approach to determining financial and economic risks in this paradigm, as well as identifying measures to change financing Russian health care. The methodological base: systemic; comparative analysis; synthesis; socio-economic and statistical methods of data analysis. The theoretical and practical significance of the study lies in an integrated system growth for managing financial and economic risks, which unites different economic entities, as well as in determining measures to change the financing mechanisms of the Russian health care system. The specialists can use the results obtained in subsequent work on the problems of risk management at the level of corporate organizations, state agencies, and society.

Keywords: society growth; risk management; financial crisis; economic crisis; health care system; state regulation; risk minimization; state and society; complex society risks

For citation: Trifonov B.I. Financial and economic risks management in Russian health care system. Management sciences. 2022;12(4):63-75. DOI: 10.26794/2304-022X-2022-12-4-63-75

INTRODUCTION

Social development is an extremely complex phenomenon, the interest in the study of which in connection with the recent transformations in society is only increasing [1–3]. In its most general form, it is a consequence of the constant human desire to improve the conditions of existence through the formation of new knowledge, development of technology, availability of necessary resources and competition.

Modern society is organised in such a way that many of its processes are associated with instability and a constant accumulation of conflict-generating factors. Under these conditions, its development has a probabilistic nature: one or another achieved result concerning the change in people's living conditions may differ from what was planned (desired) earlier. There is therefore a need to develop new governance models that take into account the changes taking place in the world, focusing on the criteria of the well-being of society (rather than traditional macroeconomic) indicators [4].

Currently, most publications are devoted to risk management in business and public activities [5, 6], while the study of the problems related to the impact of various risks on social development, access to material benefits for different population groups under uncertainty is in its initial stage.

This paper pays special attention to the management of financial and economic risks in healthcare as one of the most important systems that ensure the population's resilience and its ability to sustainable development.

FINANCIAL AND ECONOMIC RISKS FROM THE PERSPECTIVE OF SOCIAL DEVELOPMENT

According to modern concepts, the improvement of forms and methods of creating material goods is considered to be the main component of social development [7]. It is economic

progress that stimulates the transition from one state to another, more perfect, and thus triggers transformations in various spheres of human activity. The modern economy does not just create material conditions for people's life activity; it claims a decisive role in society [8, 9]. In this regard, with all the variety of risks, financial and economic risks occupy a special place.

The main reason for their emergence is the presence of uncertainty in economic relations (due to the openness of the economic system), the constant need to choose between alternative development options, the consequences of which cannot always be accurately determined. Some scientists also emphasize that the risks in the modern economy are comprehensive, many of them are unpredicTable in principle [10] and the reasons for their emergence can also be events not related to economic processes (for example, the COVID-19 pandemic) [11].

Financial and economic risks pose a threat to economic growth, affect large groups of the population, and thus have a significant impact on social development, i.e., they are Level 1 events, in contrast to others which also play a prominent role, but are Level 2 events. Consequently, the practical importance of financial and economic risk analysis cannot be overemphasised and its management becomes a key skill [12].

Until recently, only economic aspects were considered as criteria for the degree of wellbeing of a society, but in recent decades it has become obvious that other factors reflecting the level of social development should also be taken into account [13]. With this in mind, let us define the latter as the continuous spread of new standards of material and human living conditions among the population. The former refers to the actual quantity and quality of goods and

¹ Here, first-level events are defined as those processes and phenomena that have the greatest impact on social development.

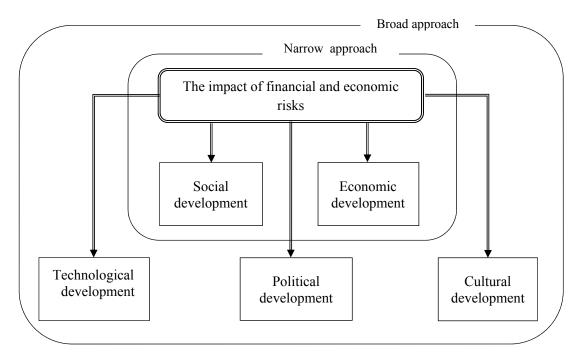


Fig. 1. Approaches to the definition of financial and economic risks in terms of society development Source: developed by the author.

services available at a certain point in time, while the latter determines non-economic values shared by society: goals, beliefs, and behavioral attitudes, etc.

Two caveats need to be made here:

The first. Social development has to be seen in terms of both economics and the humanities. At the moment, there is no single universally accepted model to describe it. This is due to the specificity of the topic and the complexity of choosing approaches to the study of processes occurring in people's lives;

The second. It has been proved (including by Nobel Prize laureates) that the population does not always act rationally. Behavioral errors associated with a systematic discrepancy between a person's opinion about a certain task and the correct solution to it have a negative impact on many economic processes [14]. This leads to a population change itself, based on the personal priorities of each individual group rather than the overall objectives of society. The absence of "external" governance would lead to

destabilization and inhibition of development. Today, the main subject of governance is the state. It protects the interests of different categories of the population, and it largely determines the speed of social development, part of which is a set of processes occurring in each of the spheres of human life and leading to their change.

Financial and economic risks actively influence these processes by predetermining objective conditions on which the "content" of these changes largely depends, and represent possible events associated with a change in the state of the economy towards its deterioration (the onset of crisis).

As a result, there is no balance between the number of financial resources actually allocated to meet people's needs and those people who are needed to do so.

A disruption of this equilibrium does not promote new standards of material and human living conditions among the population, nor does it ensure stability in the interrelationships

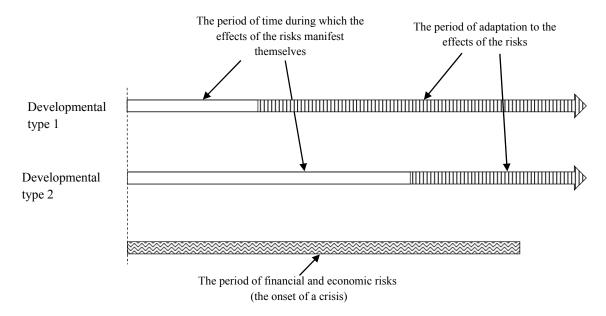


Fig. 2. The impact of financial and economic risks on different types of society development

between members of society. This is true of the health system from start to finish: the reduction in funding levels due to the realisation of risks results in health facilities not being able to fully meet the needs of the population for their services, which has a negative impact on people's health. Furthermore, one of the regularities of crises is their negative impact on the condition of those who are exposed to stress during this period [15].

We distinguish two approaches to defining financial and economic risks — narrow and broad (*Fig. 1*). In the first, the main focus is on studying the impact of risks only on changes in the standards of material living conditions, while in the second, the material humanitarian.

The narrow approach examines the relationship between these risks and economic and social development, taking into account their impact on economic processes, including the fulfilment by government and business of its obligations to the population. At the same time, it analyses what social costs are incurred by society and how this affects the development of human capital.

The broad approach studies the impact of risks on different spheres of human life (among which the economic, social, political, cultural, technological [16] are priorities), which is considered a difficult task to analyze.

KEY FEATURES OF THE IMPACT OF FINANCIAL AND ECONOMIC RISKS

Identifying and understanding the impact of financial and economic risks on societal development is the first step towards creating a system (mechanism) to manage them.

Time (as an economic category) becomes an important characteristic that determines this impact.

Development in every sphere of human life proceeds according to its own laws and at different rates. The economy, for example, is characterised by a high dynamism, which is reflected in the constant change of micro- and macroeconomic indicators. In contrast, the cultural system is characterised by constancy, and change takes place over a long period of time (17). The same processes can therefore

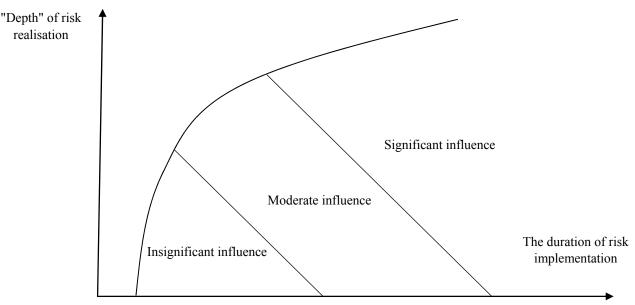


Fig. 3. The impact degrees of financial and economic risks on society development

appear chaotic or, conversely, consistent, and logical, depending on the scale of the time horizon.

The difference in the intensity of the processes involved means that for different types of societal development the time periods in which the effects of financial and economic risks manifest themselves and adapt to them do not coincide (*Fig. 2*). This is where the main danger lies: a reduction in financial resources at a certain time horizon can change the trajectory of this development not only in this period, but also in the future, much further away from the moment of risk realisation.

There are different degrees of impact of financial and economic risks on societal development. In case when the duration of their risk realisation is short-term, other things being equal, the negative effect may be negligible and, in some cases, non-existent at all. But as the duration of risks increases, the degree of their impact increases, and the extreme form is the onset of transformational processes, when the next phase of development is virtually unrelated to the previous one (i.e., there is a qualitative transformation).

Another important factor is the "depth" of risk realisation, reflected in the magnitude of the decline in output, the capitalisation of companies, as well as the level of capital outflows, etc.

Figure 3 shows the three conventional (conditional) degrees of impact of the realisation of financial and economic risks on societal development: insignificant, moderate, and significant. The horizontal axis corresponds to the duration of their impact, the vertical axis to the "depth" of their impact. The curved line defines the upper limit of the risk area under these variables (note that, in practice, in some cases it is difficult to draw a clear line).

There are *insurmounTable limitations* in assessing the impact of financial and economic risks on societal development — these are due to a combination of objective and subjective factors. Some of them can be fully or partially eliminated, while others are insurmounTable.

Most of the limitations are caused by internal contradictions and abstractness of the processes taking place in the society; among them there are those not sufficiently studied, as well as those that cannot be expressed numerically.

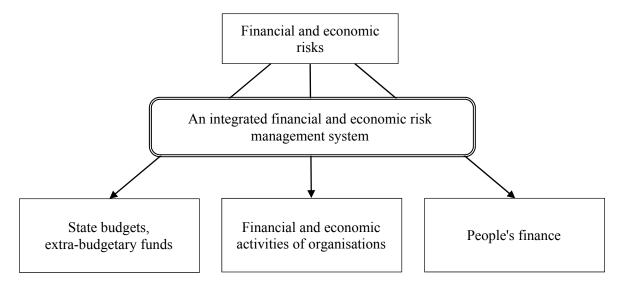


Fig. 4. Integrated financial and economic risk management system

In addition, elements of social development influence each other, and it is not always possible to establish an exact cause-and-effect relationship link between them.

Social stratification, territorial differentiation and uneven economic development are important constraints.

Difficulties in assessing the impact of risks also arise when only one research method is used. The resulting ambiguity in the interpretation of the results can lead to incorrect conclusions. Conducting work by different groups of people using several methods can significantly reduce the likelihood of these types of errors.

ESTABLISHING A COMPREHENSIVE FINANCIAL AND ECONOMIC RISK MANAGEMENT SYSTEM IS ONE OF THE KEY CHALLENGES OF THE FUTURE

Due to the highly integrated nature of the economic space, all the subjects of financial relations are exposed to financial and economic risks. And the successful implementation of risk management is only possible through the joint efforts of the state, corporate organisations, and the public, provided that a consensus is reached

between them in determining which roles, tasks and functions each of them performs. Therefore, one of the promising areas is the creation of an integrated system that, by bringing together the various participants in financial relations and introducing new methods of risk management, can ensure long-term societal development (*Fig. 4*).

Its formation should take into account not only the features identified in the previous section, but also the specific impact of risks — separately on the state budgets at all levels, financial and economic activity of organisations, the finances of the population. The main objective of such a system should be not so much to guarantee risk avoidance, but rather to anticipate risks, assess possible consequences of their implementation, choose a strategy, methods, and opportunities to manage them both "from above" (from the position of state) and "from below" (from the position of different social groups and strata).

The classical provisions used in financial risk management by corporate entities cannot be fully applied here due to the different approaches to risk management *performance criteria*: there, they are expressed through

the assessment of the amount of possible loss (or potential loss of income), whereas in the integrated system they are expressed through the prism of the impact on the living conditions of the population. In addition, the task of financial risk management is to meet the recommendations and requirements set out in the regulations of regulators and financial authorities. The functioning of an integrated system is subject to continuous upgrading of existing risk management capabilities, including the development of formal guidance documents.

Let us also draw attention to the difference between public financial risk management and a comprehensive system of financial and economic risk management. In its most general form, the former is aimed at solving problems related to the full and timely implementation of the obligations undertaken by the authorities in relation to the population, business community and public institutions [18]. The integrated system is focused primarily on ensuring financial security of people's lives.

Its implementation will allow for a mutual distribution of responsibility for risk management between participants in financial relations (i.e., governance actors). It is important that it does not simply impose formal requirements on the latter, but encourages the state, corporate organisations, and the public to constantly modernise the existing management mechanisms [19].

The initial stage of establishing an integrated management system is to build a typology of financial and economic risks from the position of social development — their systematization into classes according to given criteria and the definition of the principles of identification (assessment).

The next step is to identify those who will carry out qualitative and quantitative risk analysis and functional division between individual structures of public administration apparatus (including regional and municipal

authorities) and independent research teams. By providing assessments from different perspectives, the results will be more objective and less dependent on current political attitudes.

The last stage consists of developing and implementing measures to minimise the consequences of the realisation of financial and economic risks. Since the government, corporate entities and the public have different capabilities, three levels can be distinguished in the system. The first, which relates to the population, assumes that citizens actively use the risk management methods available to them, including insurance, accumulation (reservation), rather than being a passive participant in financial relations. The second level relates to corporate organisations, which through the use of various mechanisms can reduce employee losses associated with risk. The main (leading) role should belong to the state (third level). As the guarantor of social development stability, it is called upon to create favourable conditions for the continuous improvement of people's living standards by means of a complex system.

Given the multidimensional nature of societal processes, an integrated system cannot be a single entity. It is a set of measures aimed at reducing the impact of financial and economic risks in each specific area, e.g. in health care.

FINANCIAL AND ECONOMIC RISK MANAGEMENT (ON THE EXAMPLE OF HEALTH CARE)

The state of population's health (public health) is not only a key indicator of social development at the current moment, but is also of crucial importance for the future, being one of the factors of increasing competitiveness of the national economy and its innovative development. Therefore, the study of the impact of financial and economic risks on it is of particular interest in solving many practical problems.

Expenses of the Russian budgetary system for health care in 2011-2020

Index	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
In current prices, RUB billion	1933	2283	2318	2533	2861	3124	2821	3316	3805	4964
In 2011 prices (per capita), thousand roubles	13.5	14.7	13.6	13.4	13.6	13.8	11.8	13.3	14.7	18.4
In 2011 prices (per capita), as% of the previous year	_	8.6	- 7.0	- 1.7	1.4	1.1	- 14.1	12.8	10.6	25.0

Source: calculated by the author based on Rosstat data URL: http://rosstat.gov.ru

One of the scientific methods consists in the analysis of the dynamics of health care financing and is based on the direct correlation between the level of per capita expenditure on this industry and people's health, confirmed by many quantitative studies [20]. And changes in the latter are directly or indirectly influenced by financial and economic risks, as financing depends on the state of the economy.

Let us determine which measures to reorganise the mechanism of public and private funds flow into the Russian healthcare system could be part of a comprehensive risk management system. To do so, it is necessary to analyse the dynamics of spending on this sphere, taking into account the risks realized during the crises in 2008–2010 and 2014–2015.

In the period of economic growth, the government increased the amount of money allocated to medical care each year. For example, according to the data of the Ministry of Health of the Russian Federation, from 2004 to 2007 the volume of financing of the Programme of state guarantees of free medical assistance to citizens (hereinafter — the Programme)² increased an-

nually by 10% per capita (in 2003 prices, adjusted for inflation for medical services). In 2008 the increase was still 14%. In 2009, due to the crisis it was only 2%, and in 2010 it decreased by 3%, after which there was no increase since 2011.³

As the economy recovered, the state increased the number of financial resources allocated to healthcare. As a result, in 2012 the aggregate expenditures of the RF budget system on this sphere in constant prices (2011–100%) increased by 8.6% (tab. 1). However, the following year, funding from the federal and consolidated budgets of the Russian Federation in constant prices decreased, which led to an overall decrease in healthcare expenditures by 7.0%. This trend continued in the crisis year of 2014 (a decrease of 1.7% in constant prices), followed by an increase (of 1.4 and 1.1% in 2015 and 2016, respectively). In other words, from 2011 to 2018, public spending on health care decreased by 1.5% in constant prices. If we compare the

² The Programme defines the scope of medical care financed

from public funds. This programme was first approved by Act No. 1499–1 of 28.06.1991 "On medical insurance for citizens in the Russian Federation" (no longer in force).

³ On the implementation of the Programme of State Guarantees of Free Medical Care for the Citizens of the Russian Federation in 2001–2011: a report. Ministry of Health of the Russian Federation, 2002–2012. URL: https://minzdrav.gov.ru

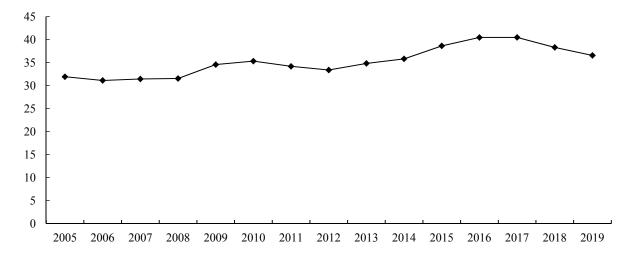


Fig. 5. The share of personal expenses in the structure of total health care expenditures in Russia, % Source: World Health Organization URL: http://https://apps.who.int/nha/database/ViewData/Indicators

financing of the sector in 2019 with previous periods, *Table 1* shows that in constant prices it only returned to the level of 2012.

Therefore, it can be said that when financial and economic risks are realised, public expenditure on health care (all other things being equal) starts to fall almost immediately. One of the reasons is the use of only a pay-as-you-go (allocation) funding mechanism, with all funds received being used to meet current consumption. The lack of other instruments to complement the pay-as-you-go (allocation) system increases the dependence of the sector in question on the current state of the national economy.

The dramatic increase in health care funding that occurred in 2020 may create the illusion that things have started to improve in the long term. The COVID-19 pandemic has brought about changes in various areas of people's lives. In many regions, the problem of poor social infrastructure (including inadequate hospital beds and staffing shortages) has worsened. A massive national response to the pandemic forced the government to allocate additional funds from the federal budget, but these were aimed at preventing the spread of the virus rather than addressing the previous lack of financial resources in the industry.

Against the background of low levels of budgeting, private spending on health care has increased. Between 2005 and 2017, the share of personal spending by citizens in relation to total expenditure in this area gradually increased (*Fig. 5*). It reached its highest value (40%) in 2016–2017, dropping to 38% and 37% in 2018 and 2019, respectively, in the following years (due to increased funding from the state). There has also been an increase in the expenditure pattern of the population on health services: while this level averaged 2.6% in the period 2005–2012, it increased to 3.2% in 2013–2019.⁴

At the same time, despite the significant role of medical care received by Russian residents from extra-budgetary (corporate and private) funds, for the state the private healthcare market is a regular commercial activity rather than an element of the national healthcare system, which not only reduces efficiency from the use of available financial resources, but also creates limitations in the implementation of risk management procedures.

⁴ Calculated by the author on the basis of data from the Russian Economic and Health Survey of the National Research University Higher School of Economics. URL: http://hse.ru/rlms

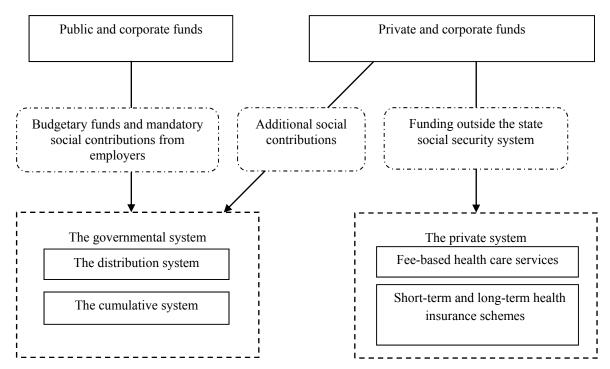


Fig. 6. Fin Financial flows in Russian health care system

It follows from the above that the priority areas for changing the financing of the Russian healthcare system are:

- The introduction of a cumulative mechanism which has the advantage of increasing financial resilience to negative changes in the economy in the short and medium term through the accumulation of finances;
- Defining, at the legislative level, the role of private and collective funds in financing the sector. This will ensure three levels of financial and economic risk management. In addition, the introduction of additional social contributions to the mandatory health insurance system is required in order to increase the amount of money in the public health system and to equalise the opportunities for the population to receive modern medical care.

Figure 6 illustrates one of the options for financial flows in the Russian healthcare system. In the state segment, in addition to the existing distributive mechanism of financing, a

cumulative system should function, in which a part of budgetary funds and obligatory social contributions of employers are accumulated. Its task is to generate resources that can be used in accordance with the established acts, including the mitigation of financial and economic risks. The Federal Compulsory Medical Insurance Fund, for which these functions are basic, is responsible for allocating resources and controlling the efficiency of their use. It is proposed to compensate for the amount of funds allocated to the funded system and thus "dropping out" of the current financing of medical services through additional social contributions, which should be paid by the insured (whose income exceeds a certain level) or by their employer as part of the social package in the Compulsory Medical Insurance system. The above-mentioned persons have the right to refuse the additional payments, but in this case the state's social guarantees are reduced.

Paid (fee-based) medical services and voluntary health insurance are financed from

Required changes in health system financing

Level	Changes					
Level 1 (population)	Development of a long-term healthcare insurance system;Payment of additional social contributions					
Level 2 (corporate entities)	Extension of the social package for employees (payment of contributions: supplementary social security and long-term health insurance)					
Level 3 (the state)	 Development of the state fully funded system; Changes in the scope of social guarantees provided by the state 					

Source: developed by the author.

private and corporate funds (outside the system of state social guarantees). What is new is the creation and development of long-term health insurance (complementary to the public health care system), which assumes that during working life the insured person has savings in a personal account, which after retirement age are used to cover the costs associated with the provision of medical care privately. The level of contributions is agreed upon individually and depends on the amount of the insurance scheme. Like private pensions, long-term care insurance has the potential to become an important part of corporate social programmes. At the initial stage, it can be implemented on the basis of a specialised fund established under the Federal Compulsory Medical Insurance Fund, but in the future, it cannot be ruled out to be implemented within other organisations, including commercial ones.

A long-term health insurance system would reduce the dependence of funding of medical care for the population of retirement age on negative changes in the economy. Combined cumulative products combining voluntary pension and health insurance could also become a new form of social protection for this category of citizens.

These changes will modernise the distribution of funds at each of the three levels of the health-care system identified in the

previous section (*Table 2*). Their introduction will not only reduce the impact of risks on financing the sector but will also make people more responsible for their own health and increase organisations' focus on the health of their employees.

It is worth noting that one of the main constraints to the development of an accumulative mechanism for financing medical care in the public and private systems is the lack of trust in them on the part of premium payers. The large time lag between paying and using the accumulated funds does not create a clear understanding of what the latter are formed for. Other obstacles are the possibility of "absorption" of cash flows by financial markets and the existence of a risk of depreciation of savings.

The implementation of instruments such as contributory accumulative financing, as well as the integration of public and private funds, and the differentiation of public social guarantees, would improve the financial sustainability of the health system and the manageability of cash flows in this area.

CONCLUSIONS

What new governance mechanisms aimed at reducing the impact of financial and economic risks on social processes can be introduced in the future is highly debaTable. This requires

not only the consideration of risk management procedures from a new angle, but also the creation of a dedicated infrastructure.

As a result of this study, two methodological approaches to the definition of financial and economic risks from the perspective of societal development have been proposed, which can be a starting point for further work in this direction.

The presented analysis of the specifics of risk impact has shown that the problem of risk management is large-scale and lies in the historical, economic and social planes. These features are one of the key reasons why the classical financial risk management provisions used in corporate structures cannot be applied in this case.

The integrated system proposed by the author, which brings together various participants in financial relations, is one of the promising directions in managing risks in the field of public development. The developed recommendations on changing the mechanisms of financing Russian health care can be seen as part of this system, aimed at reducing the impact of risks in public health protection, which requires changes in legislation (including the country's national security strategy), as well as the creation of conditions that promote the role of all subjects of financial relations in the process of risk management.

The prospects for implementing such a system are ambiguous, but the changes associated primarily with economic modernisation and the realisation of the importance of developing new innovative approaches in the regulation of many social processes are creating positive preconditions for its formation in the future. It should be noted that its effectiveness will largely depend on whether the government succeeds in building a proper dialogue with corporate organisations and the population.

REFERENCES

- 1. Polterovich V.M. Towards a general theory of socio-economic development. Part 2. Evolution of coordination mechanisms. *Voprosy ekonomiki*. 2018;(12):77–102. (In Russ.). DOI: 10.32609/0042–8736–2018–12–77–102
- 2. Muringani J., Fitjar R.D., Rodríguez-Pose A. Social capital and economic growth in the regions of Europe. *Environment and Planning A: Economy and Space*. 2021;53(6):1412–1434. DOI: 10.1177/0308518X211000059
- 3. Salamon L.M., Sokolowski S.W., Haddock M.A. Explaining civil society development: A social origins approach. Baltimore, MD: Johns Hopkins University Press; 2017. 321 p.
- 4. Avdyskiy V.I., Bezdenezhnykh V.M. Problems and trends in the development of management of complex socioeconomic systems, taking into account the risk-based approach. *Razvitie i bezopasnost'*. 2021;(2):42–54. (In Russ.). DOI: 10.46960/2713–2633 2021 2 42
- 5. Eriashvili N.D., Groshev I.V., Guseva S.G. Entrepreneurial risks management in the system of economic security. *Vestnik ekonomicheskoi bezopasnosti = Vestnik of Economic Security*. 2018;(2): 374–379. (In Russ.).
- 6. Postula M. Risk analysis as an instrument of public management. In: Raczkowski K., ed. Risk management in public administration. Cham: Palgrave Macmillan; 2017:93–113. DOI: 10.1007/978–3–319–30877–7_4
- 7. Kukushkin S.N. Economics of information society. Moscow: Impuls; 2018. 231 p. (In Russ.).
- 8. Lima de Miranda K., Snower D.J. Recoupling economic and social prosperity. IZA Discussion Paper. 2020;(12998). URL: https://docs.iza.org/dp12998.pdf
- 9. Bodrunov C.D. Global transformation of modern society and national development goals of Russia. *Nauchnye trudy Vol'nogo ekonomicheskogo obshchestva Rossii* = *Scientific Works of the Free Economic Society of Russia*. 2021;230(4):54–65. (In Russ.). DOI: 10.38197/2072–2060–2021–230–4–54–65
- 10. Solodovnikov S. Yu. Risk economy. Ekonomicheskaya nauka segodnya. 2018;(8):16–55. (In Russ.).

- 11. Beck T. Finance in the times of COVID-19: What next? In: Baldwin R., Weder di Mauro B., eds. Mitigating the COVID economic crisis: Act fast and do whatever it takes. London: CEPR Press; 2020:179–184. URL: https://cepr. org/system/files/publication-files/60118-mitigating_the_covid_economic_crisis_act_fast_and_do_whatever_it_
- 12. Beazley I. Financial management in government: insights on skills development. OECD Journal on Budgeting. 2019;18(3):81-124. DOI: 10.1787/52185bf3-en
- 13. Mikhalska-Zyla A., Stolbov V. P. The interdependence of quality of life and resources of social capital. Sotsiologicheskie issledovaniya = Sociological Research. 2018;(7):71-80. (In Russ.). DOI: 10.31857/S 013216250000187-8
- 14. Gigerenzer G. The bias bias in behavioral economics. *Review of Behavioral Economics*. 2018;5(3–4):303–336. DOI: 10.1561/105.00000092
- 15. Santalova M.S., Borshchova A.V., Ermilina D.A., Soklakova I.V. Anti-crisis management of socio-economic systems. 4th ed. Moscow: Dashkov & Co.; 2022. 236 p. (In Russ.).
- 16. Smyshlyaev V.A. The process of social development as an object of state regulation: Definitional, politicalphilosophical and innovative aspects. Innovatsionnaya ekonomika: perspektivy razvitiya i sovershenstvovaniya = Innovation Economy: Prospects for Development and Improvement. 2016;(1):242-247. (In Russ.).
- 17. Kleer J. Cultural system and social development. Obshchestvennye nauki i sovremennost = Social Sciences and Contemporary World. 2018;(5):18–30. (In Russ.). DOI: 10.31857/S 086904990000382–2
- 18. Ivanov O.B., Buchvald E.M. Risk-based Management in the system of public power in Russia. ETAP: ekonomicheskaya teoriya, analiz, praktika = ETAP: Economic theory, analysis, and practice. 2021;(4):25-42. DOI: 10.24412/2071-6435-2021-4-25-42. (In Russ.).
- 19. Carlsson-Wall M., Kraus K., Meidell A., Tran P. Managing risk in the public sector the interaction between vernacular and formal risk management systems. Financial Accountability & Management. 2019;35(1):3–19. DOI: 10.1111/faam.12179
- 20. Ulumbekova G.E., Ginoyan A.B., Chaban E.A. Quantitative analysis of the factors influencing the state of health of the population in the Russian Federation. Meditsinskoe obrazovanie i professional'inoe razvitie = Medical *Education and Professional Development.* 2016;(2):107–120. (In Russ.).

ABOUT THE AUTHOR



Boris I. Trifonov — Cand. Sci. (Econ.), external lecturer of the Department of Global Financial Markets and Financial Technologies, Plekhanov Russian University of Economics, Moscow, Russia

https://orcid.org/0000-0001-7985-6052

trifonov.b@gmail.com

Conflicts of Interest Statement: The author has no conflicts of interest to declare.

The article was submitted on 19.07.2022; revised on 24.10.2022 and accepted for publication on 25.11.2022. *The author read and approved the final version of the manuscript.*