Financial instruments for neutralisation of national project implementation risks

Vladimir A. Slepov, Tatyana N. Rodenkova, Elena I. Gromova, Zhanneta I. Gerzelieva, and Dmitry A. Pokamestov*

Plekhanov Russian University of Economics, Stremyanniy lane, 36, 115093 Moscow, Russian Federation

Abstract. This paper represents the results of national and infrastructure project funding shortfalls study and determined implementation risks of such projects attributed to the Russian export market fluctuations, additional budget expenses in terms of the pandemic and upon the slowdown of macroeconomic indicators' growth. In order to neutralize risks of national project implementation and cover requirements in infrastructure investments the study proposes the financial instruments of Public Private Partnership (PPP) institute, including instruments for update and development of project financial support mechanism providing the sustainable development of regional economy.

1 Introduction

Upon preservation of foreign threats and domestic shocks, the importance of sustainable and balanced social and economic development of the whole country and regions primarily due to the synergizing effect from financial and human capital assets' use grows for Russia. One of the solution stages is the successful implementation of 12 National Projects, each including from 3 to 11 Federal Projects with "the total funding 25.7 tln. RUB"; and also major infrastructure projects implemented in 63 regions of country. Russia has gained the vast experience of project development, including the use of Public Private Partnership financial mechanism allowing to balance the risks between partners. The expansion of PPP financial instruments use within National and infrastructure projects promotes their implementation risk neutralization in regions and the preservation of their sustainable development trends.

2 Materials and Methods

The study was conducted within theories of Neoclassical and Post-Keynesian economic growth model, the sustainable development concept, effective budget and financial management. As the basis of study were used theoretical principles of competitive selection of the most effective institutions (A. Alchian, M. Friedman) and the economic contract theory (O. Hart, B. Holmström) allowing to compare ownership structures and financial flows of

* Corresponding author: Rodenkova_t@mail.ru

public and private economic sectors, analyse the financial activity of public authorities. The methodological study basis are general scientific and particular cognition methods: deduction and induction, the systematic approach, the integrated analysis allowing to consider the problematics of National and infrastructure project funding from the point of their financial support mechanism development within the Public Private Partnership institute. The information and analytic study base consist of: the law on PPP, outcomes of the Government of the Russian Federation and the Council of Federation of the Federal Assembly of the Russian Federation; and materials of Ministry of Finance of the Russian Federation, Ministry of Economic Development of the Russian Federation, the Accounting Chamber of the Russian Federation, National Centre for PPP development.

3 Results and Discussion

Based on objectives and tasks established by the Presidential Edict, National Projects concentrate resources by three key development directions: the economic growth – 10.1 tln. RUB (39.3 % of total funding); comfortable living environment – 9.9 tln. RUB (38.4 %); human capital assets – 5.7 tln. RUB (22.3 %). The priority for financial support of National Projects is represented in Table 1.

Table 1. National Project Funding for 2018-2024

National Projects	Amount of funding (bln. RUB)	Share in total funding (%)	Federal Budget share in total funding (%)
<i>Economic Growth</i>	<i>10 109.3</i>	<i>39.3</i>	
“Integrated Main Infrastructure Modernization and Extension Plan”	6 348.1	24.7	47.7
“Digital Economy”	1 634.9	6.4	67.3
“International Cooperation and Export”	956.8	3.7	100.0
“Science”	636.0	2.5	63.6
“Small and Medium Entrepreneurship and Entrepreneurial Initiative Support”	481.5	1.9	86.4
“Labour Productivity and Employment Support”	52.1	0.2	87.8
<i>Comfortable Living Environment</i>	<i>9 887.0</i>	<i>38.4</i>	
“Safe and High-Quality Roadways”	4 779.7	18.6	9.2
“Environment”	4 041.0	15.7	17.4
“Housing and Urban Environment”	1 066.2	4.1	83.6
<i>Human Capital Assets</i>	<i>5 728.9</i>	<i>22.3</i>	
“Demography”	3 105.2	12.1	95.8
“Healthcare”	1 725.8	6.7	79.2
“Education”	784.5	3.0	92.2
“Culture”	113.5	0.4	96.7
<i>TOTAL</i>	<i>25 725.2</i>	<i>100.0</i>	<i>51.1</i>

Source: compiled by authors according to Government of the Russian Federation data

The structure of funding sources was determined: all National Projects and the Integrated Infrastructure Plan shall be funded from the Federal Budget on 51.1% (13.2 tln. RUB); from extrabudgetary sources on 29.2% (7.5 tln. RUB); from consolidated budgets of constituent territories of the Russian Federation) on 19.1% (4.9 tln. RUB) and from State non-budgetary funds on 0.6% (147.8 bln. RUB) . In order to replenish the financing resources the Government of the Russian Federation adopted the resolution on VAT increase since 2019 from 18% to 20%, the amendment of excise policy, the redistribution of certain national programme redistribution.

The National Project funding specifics is in the fact that financing sources are foreseen to be diversified. For example, projects with the highest financing amount, the main funding is planned to be attracted from other sources. Thus, the major part of funds (51.4 %) for the implementation of “Integrated Infrastructure Plan” shall come from extrabudgetary sources; the National Project “Safe and High-Quality Roadways” on 90.8 %; the National Project “Environment” funding on 79.3%. Provided that the major part of this National Project (60.0% of total funding) is the Federal Project “The Implementation of the Best Available Techniques” that foresees 98.9% of extrabudgetary funding.

One further peculiarity are National Project funding trends by implementation periods. For all National Projects the biggest share of funding (39.4 %) accrues to 2021-2020 and only for 3 National Projects implementation (“Healthcare”, “Demography” and “Digital Economy”) 1/3 of financing amount shall be obtained within first two years of implementation (end of 2018 and 2019-2020). The financing distribution of National Projects by years of the current three-year period is characterised by slight growth: in 2020 – on 10.9 %; in 2021 – on 11.2% (Fig. 1).

Provided that during the period 2019-202 the budget of regional projects amounts only to 40.7 bln. RUB, 17 bln. RUB of which came from extrabudgetary sources. However, “the actual amount of budget appropriations allocated for the National Projects is on 380.8 bln. RUB less that the funding provided by their passports . According to the Accounting Chamber experts, for the whole six-year period of National Project implementation the funding of education, healthcare and other key direction in percent to GDP will change little, i.e. “the previous system of Federal Budget and consolidated budget expenses will remain unchanged” .

Fig. 1. Financing distribution of National Projects by years of the current three-year period

Where: Год – Year; Расходы на реализации нацпроектов, предусмотренные паспортами проектов - Expenses on National Project implementation provided by the project passports; Расходы федерального бюджета - Federal Budget expenses; Объем субвенций из федерального бюджета – бюджетам субъектов РФ - Scope of Federal Budget subventions to budgets of constituent territories of the Russian Federation

Consequently, the risk of National Project underfunding arises, both due to budget appropriations that depend significantly from global raw materials markets' status; are determined by market fluctuations and credit ratings of government and national business structures; and due to extrabudgetary receipts, which level is determined by historically formed national low savings rates in the corporate sector and household sector .

Another risk of National Project implementation is the carry-forward of huge financing amounts into subsequent periods that draws back the period of their social and economic effects. For example, the Government of Russia recognizes that “the third part of National Programmes are ineffective. Their implementation does not result in enhancing of budget funds' use” . While the primary funding of National Projects in “Economic Growth” direction in 2019-2021 promoted both the growth of human capital assets and the efficiency enhancing of all expenses on National Projects in general. According to experts, if financial resources for human capital asset quality improvement will be increased, the implementation of National Projects can gain max. 0.7-0.8 points to potential economic growth rates per year .

The project funding foresees not only the interrelation of objective, tasks and indicators of National Projects with objective, tasks and indicators of the corresponding National Programmes, but the availability of approved methods for calculation of such indicators. However, at the moment “over 70% of National Project indicators do not have approved methods for calculation” . I.e. the risk of possible unjustified redistribution of budget funds arises, both between separate National Projects and containing Federal projects and between implementing regions, considering that according to the estimation of Ministry of Finance of the Russian Federation, min. 60% of National Project measures are referred to authorities of constituent territories of the Russian Federation. It also relates to “the established performance appraisal system does not function in every respect due to incorrectly selected indicators “ . Things are made worth by the fact that the methods for decomposition of Federal project indicators into containing regional projects are not approved that creates the risk of the unfulfillment.

Along with possible risks of National Project implementation, another challenge of the national sustainable development support is the attraction of long-term investments for infrastructure project implementation. Currently, the annual global infrastructure investment requirements estimated by OECD amounts to 6.3 tln. USD. International financing organizations estimate the same “Russian infrastructure investment requirements as \$ 1.8 tln (66% of current capabilities). China, starting from 2000's, has being investing to infrastructure 8-10% of GDP, India – 4-6% of GDP; Russia plans to invest app. 2% of GDP upon the requirement of app. 120 tln. RUB that corresponds app. 8% of GDP”.

In our opinion, for the development of national sustainable growth and minimization of National Project implementation risks not only effective use of conventional funding sources is paramount, but the formation of new sources providing intensive monetary flows is required. One of such resources in the context of forecasted budget deficit is the use of Public Private Partnership financial mechanism instruments. However, the fact that as main extrabudgetary funding sources for the implementation of National Projects are provided funds of major state-owned companies, such as Russian Railways (RZD) or Rosatom, and possible involvement of private investors does not mean that PPP mechanisms will be used, because there are no applicable bylaws providing exact rules for spending National Project funds through such mechanisms. In order to solve this issue, the national and foreign PPP institute experience shall be applied.

If in the modern foreign practice (USA, Great Britain, Germany) the most common form of PPP project funding is bank crediting covering max. 80-90% of total needs, then in Russia such source is the most problematic . Maximum 20 % of financial resource needs for PPP projects practically in all countries with the developed PPP market (Great Britain, EU countries, China, etc.) are covered by share capital “as subordinated debt and/or issue of shares” . Funds of national and regional investments funds, development corporations are attracted for PPP projects in such countries as USA, Canada, China, India. Another funding source of PPP projects in these countries are project bonds that along with bank credit require a preliminary independent project credit verification and rather high level of its security. In USA, Great Britain, Germany state subsidies are mainly used for co-financing of capital construction expenses; and in such cases where project expenses are significant and credit and share capital volumes are insufficient. In Russia and China, where state corporations dominate on the PPP market, state subsidies are provided within target investment programs.

The national and foreign practices face the issue of optimal project funding structure determination “based on the project implementation efficiency indicator evaluation” . In contrast to Russia, for countries with the developed PPP market the key criterion for funding structure formation is the risk allocation between partners. In Russia, as a rule, the project subsidizing, including regional projects, and investments from development institutes are carried out at the design stage and government grants are provided at the constructions stage; the concedent payment could be effected at both PPP object design and operation stages and risks are allocated conditionally only at pre-investment stage.

Therefore, in order to determine the most effective financial instruments not only neutralizing National Project implementation risks, but covering need in infrastructure investments, the best national practices of PPP projects is interested. Staring from 2016, clear leaders by investment amounts in PPP projects in Russia are Moscow and Saint-Petersburg (due to tax preferences and regional investor support, introduction of offset agreements and special investment contracts, etc); they are followed by KhMAD-Yugra and Bashkortostan (in which financial institutes of PPP project support are functioned) and Samara region (that is distinguished by effective integration of PPP mechanism in govern programmes).

Fig. 2. National Project funding process

The detailed analysis of Russian and foreign practice allows to distinct to groups of possible instruments for PPP project funding. These are update instruments and development instruments of mechanism for their financial support (Fig. 2).

The study showed that update instruments of project financial support mechanism are the most successfully implemented, tried and tested by regional leaders in PPP development instruments for funding attraction. They can include: as direct state support: capital grants, operational subsidies, subordinated credits; as state contingent liabilities: establishment of infrastructure funds, NPF (non-governmental pension fund) concession bonds, deferment of payments with governmental customer, extension of green investments' use; special-purpose project funding vehicle bonds, decrease of straight bond interest rates, etc.; as indirect support: introduction of risk-oriented approach and hedging instruments in project company activities; integration of PPP project financial model in the system of strategic and budget planning, tax allowances and preferences, preferential depreciation; preferential rent of government or municipal property, etc. Their widespread occurrence stimulates the use of PPP mechanism for implementation of projects embedded in Federal Programmes and National Projects.

The second group "development instruments of PPP project financial support mechanism that "represents the complex of new financial solutions ensuring the need in long-term investments". In our point of view, new instruments of PPP project financial support mechanism offered by the Government of the Russian Federation and the Bank of Russia (as the direct state support – "the budget leg"; as state contingent liabilities: removal of direct investments into project company capital ban, infrastructure mortgage, the institute of individual pension capital; as indirect support: introduction of light regulation forms on long-term investment market), in short-term perspective will allow to intentionally decrease the uncovered need in infrastructure investments, mostly implemented within National Projects. According to experts, the demand for concession bonds and other securities that still not institutionalized amounts to "approximate 400 420 bln. RUB and is minimum four times higher the available scope of concession bonds, i.e. almost 16% of investment potential available for infrastructure".

The wide differentiation of financial instruments and the necessity to form the optimal PPP project capital structure considering the allocation of risks between public and private partners foresee the use of "system model of financial and managerial decision-making" as the conceptual framework of digital platform concentrating the database of planned and implemented projects, enabling online monitoring of main project performance indicators.

4 Conclusion

12 National Projects and "2024 Integrated Main Infrastructure Modernization and Extension Plan" establish priorities and concentrate resources by three key development directions: economic growth, comfortable living environment, growth of human capital assets. The successful implementation of National Projects is the first stage for new economic growth model formation that is based on the sustainable and balanced social and economic development due to mobilization of financial and human capital assets. However, upon preservation of "old scheme" of Federal Budget expenses, foreign threats and shocks, financial risks of National Projects implementation arise: underfunding risks (due to both budget appropriations and extrabudgetary receipts); risks of drawback of their social and economic effects; risks of unsanctioned redistribution of budget appropriations, etc. In authors' opinion, in order to neutralize risks of National Project implementation and cover needs in long-term investments, it is reasonable to use financial instruments of PPP institute, including update instruments and development instruments of project financial support

mechanism providing the regional economy sustainable development. Provided that the role and importance of financial and managerial decision-making digitalization are emphasised.

References

1. The National Project Funding, <https://icss.ru/>
2. The National Project Funding, <http://government.ru/>
3. The Financial Support of National Project Implementation. The Council of Federation of the Federal Assembly of the Russian Federation. Proceedings of round table (2018), <http://council.gov.ru/>
4. *National Projects as deceptive maneuver from budget saving*, <https://yandex.ru/>
5. *Financial resources of Russian economy growth*. Monography, Editorship of Professor V.A. Slepov, 206 (2017)
6. I.V. Tulakova, *National Programme Performance Evaluation: Challenges and Perspectives*, 4, 24 (2017)
7. The funding of National Projects considers the budget approach to their implementation, <https://news.rambler.ru/>
8. M.E. Kosov, R.G. Akhmadeev, V.M. Smirnov, S.Y. Popkov, I.N. Rycova, *International Journal of Energy Economics and Policy*, **7(6)**, 128 (2017)
9. *Requirements of Russian in infrastructure investments for next 15 years*. National Association of Concessioners and Long-Term Investors in Infrastructure Expert Review, <https://investinfra.ru/>
10. I.V. Moiseeva, S.A. Kochetkova, *International Journal of Applied and Fundamental Studies*, **7**, 1281 (2015)
11. A.F. Fayrushin, *Horizons of Economics*, **4(30)**, 87 (2016)
12. E.N. Zakharova, A.A. Mokrushin, A.R. Phizova, S.A. Khatukay, S.K. Chinazarova, *Bulletin of ASU*, **3(185)**, 163 (2016)
13. S.V. Pospelov, *Siberian Economic Bulletin*, **4**, 48 (2016)
14. D.D. Tregubova, *Young scientist*, **17**, 387 (2017)
15. E.I. Mantaeva, K.M. Maksimova, V.S. Goldenova, *Fundamental studies*, **4(1)**, 191 (2016)
16. D.N. Ershov, *Financial Journal*, **1**, 34 (2019)
17. M.V. Sigova, I.A. Kruglova, M.S. Vlasova, *Economics and Management*, **5(127)**, 21 (2016)
18. Yu.A. Belogortseva, *The Eurasian Scientific Journal*, **3**, 1 (2018)
19. I.I. Saveliev, N.V. Levitskaya, S.V. Nikiforova, M.B. Khripunova, *State programme performance evaluation: Monography*, 332 (2016)
20. V.A. Slepov, T.N. Rodenkova, D.K. Aliev, «Financial Life», **4**, 62 (2019)
21. V.A. Slepov, *Journal of Advanced Research in Law and Economics*, Volume **X**, **4(42)**, 1303 (2019), <http://journals.aserspublishing.eu/>
22. V.A. Slepov, V.K. Burlachkov, T.P. Danko, M.E. Kosov, I.I. Volkov, N.V. Ivolgina, V.D. Sekerin, *European Research Studies Journal*, **20(4)**, 457 (2017)
23. A.V. Sigarev, M.E. Kosov, O.B. Buzdalina, R.A. Alandarov, I.N. Rykova, *European Research Studies Journal*, **21(1)**, 542 (2018)

24. M.E. Kosov, R.G. Akhmadeev, D.A. Smirnov, S.P. Solyannikova, I.N. Rycova, International Journal of Energy Economics and Policy, **8(4)**, 83 (2018)
25. R.G. Akhmadeev, M.E. Kosov, O.A. Bykanova, T.B. Turishcheva, IBIMA 2018 - Vision 2020: Sustainable Economic Development and Application of Innovation Management from Regional expansion to Global Growth, 51 (2018)