PUBLIC SECTOR TRANSFORMATION AND ITS EFFECTIVENESS IN THE NATIONAL ECONOMY

¹REVKUTS Alexandra V.,

²DEMCHENKO Svetlana K.,

³TERESHCHENKO Natalia N.,

⁴ALEKSANDROV Yuri L.,

⁵DEMCHENKO Olga S.

Abstract:

The processes of transformation of the public sector are set various goals and objectives, such as the growth of state revenues; reduction of government obligations and expenses in relation to state property; increasing the efficiency of enterprises, attracting private investment resources to the development of the national economy. Public sector transformation processes should be considered in the context of the effectiveness and quality of its functioning in the national economy.

Key words: public sector, transformation process, methodology for evaluating efficiency, macroeconomic efficiency of the public sector, integral indicator of performance.

1. Introduction

The public sector is an integral element of the national economy of any country and is subject to constant transformational changes under the influence of various factors (economic, social, political, institutional). The transformation of the public sector is one of the most significant institutional transformations of the Russian economy, as a result of which the state's monopoly on the means of production was eliminated, after which the non-state sector of the economy was formed, which covers a significant part of Russian organizations.

¹ Siberian Federal University, PhD student, sebtk@mail.ru

² Siberian Federal University, doctor of Economics, Professor

³ Siberian Federal University, doctor of Economics, Professor

⁴ Siberian Federal University, doctor of Economics, Professor

⁵ Siberian Federal University, candidate of economic Sciences, associate Professor

Despite a rather long period of time (about thirty years) after the transition from a command-administrative model to a market one, there are problems in the Russian economy related to commodity orientation, imbalances in the sectoral and regional structure, increasing income differentiation and low growth rates and the quality of life of the population. Solving these problems will require a change in the scale of the public sector, its functional role, areas and activities, i.e. further transformation in view of increasing the efficiency of its functioning.

The works of A. Smith [21], U. Petty [15], D. Ricardo [19], J.S. Mill [11], the founders of classical political economy, and A. Marshall [8], J. Hicks [28], representatives of the neoclassical direction, are devoted to the problems of transformation of forms of ownership in Russia and the influence of these processes on the dynamics of the national economy, the study of the economic content and the functional role of the public sector in a market economy. The institutional framework for the transformation of the public sector is disclosed in the works of A. Auzan [2], D. North [13], R.M. Nureev [14], D. Rodrik [30], A. Wagner [31], R. Findley [27], J. Wilson [27].

In Russian science, the issues of state property transformation were actively investigated by S.Yu. Glazyev. [5], Kazantseva E.G. [6], Makarenko, OS [7], Melnikov D.V. [10], Mirontseva A.V. [12], R. Mirontsev [12], Pozhilov D.M. [16], Polterovich V.M. [17], Sukharev O.S. [22], Tertyshny S.A. [23], Sheremetyeva L.N. [26] et al.

The following researchers studied the performance of the public sector: Atkinson, E.B. [1], Balatsky E.V. [3,4], R. Musgrave [9], P. Musgrave [9], E.G. Popkova [18], J. Stiglitz [34], Shakhovskaya L.S. [25] et al.

2. Method

The experience of systemic changes in the Russian economy over the period from 1999 to 2017 allowed us to distinguish two stages of the transformation of the public sector. The first stage falls on the period from 1999 to 2012 and is associated with the inconsistency of the legal and economic framework of transformation, with the implementation of a transformation strategy, and the accumulation of transformation experience. The second stage is associated with the modern period (2013-2017) and is characterized by the harmonization of the institutional framework of transformation processes.

There was an increase in the number of enterprises and organizations of private form of ownership and a decrease in the number of public sector organizations from 2000 to 2015

(Fig. 1). Since 2016, there has been a reduction, both in the private and public sectors of the economy [20]. Other trends are demonstrated by employment dynamics in these sectors of the economy. The average number of employees in the public sector decreased (by 4, 4 million people) from 22.1 million people in 2005 to 17.7 million in 2016, there was an increase in employment in the private sector (by 1.9 million) from 19.6 million to 21.5 million, respectively [24].

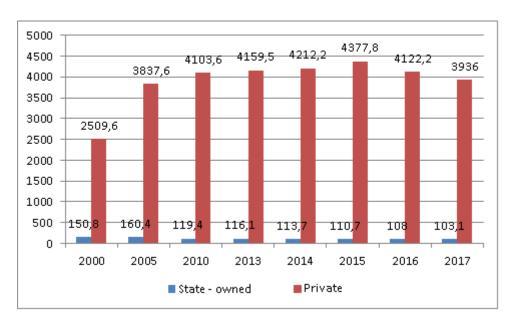


Fig. 1. Distribution of enterprises and organizations by ownership in Russia (2000-2017), the number of enterprises and organizations

A carefully planned government program and an understanding of potential problems is an important factor in successfully transforming the public sector. When making decisions, it is necessary to consider the long-term potential for monitoring and the costs of assessing the performance of the public sector.

The identified criteria for evaluating the efficiency of the public sector from the point of view of the state may be reflected in the rationality or optimality of the resulting structure of the economic system.

The following methods are proposed for evaluating the efficiency of the public sector [1, 3, 9, 18, 25, 29, 32]: approach the assessment from the point of view of the ratio of results and costs, for example, based on labor productivity indicators in public sector enterprises (the ratio of revenue or production to the number of employed workers); investment activity (the ratio of capital investment to revenue or production); indicators of innovation activity. The interpretation of the effectiveness of the public sector is also associated with

the rationality and justification of its existing scales (the principle of the "golden section", the concept of the equilibrium efficiency of the public sector, etc.).

Within the framework of a system-wide approach, it is necessary to consider the macroeconomic efficiency of the public sector and use an integral performance indicator that takes into account institutional conditions (opportunities to participate in government procurement, level of administrative barriers, level of development of the legislative framework governing social and economic activities, level of participation in government contracts, state debt sectors), the quality of economic policy (government programs mms, level of financial state support), market conditions (level of competition in domestic markets, level of general unemployment, industrial production index), access to capital (level of state financing of the private sector, level of financing of banks), access to R & D and technologies (level of internal costs for research and development by sector of activity, level of innovation activity).

The methodology for assessing the effectiveness of the public sector using an integral indicator is divided into two stages:

- 1. The linking stage, during which the indicators of two periods of the public sector functioning are compared;
- 2. The functional stage, during which the analysis of the obtained comparison results takes place, is transferred to the point estimate.

In contrast to the previously obtained results, the methodology for assessing the functioning of the public sector can be based on the coefficient of deviation of actual values in a specific period from the obtained indicators for the same previous period. We suggest to call this indicator the performance index of the public sector I_{PTC} , it should be calculated by the formula:

$$I_{PTCij} = \frac{P_{ij}^t}{P_{ii}^{t-1}} \tag{1}$$

where P_{ij}^t - j-th index of the i-th section, obtained for the current period of time t; rge P_{ij}^{t-1} - j-th index of the i-th section, obtained for the previous period of time (t-1).

$$cpI_{PTCi} = \frac{\sum_{i=1}^{n} I_{PTCij}}{n} \tag{2}$$

where $\sum_{i=1}^{n} I_{P\Gamma Cij}$ – sum of index values in i - th section; ${\rm cp}I_{P\Gamma Ci}$ – average index for i - th section;

n – number of indicators in the i - th section.

$$o \delta u I_{PTC} = \frac{\sum_{j=1}^{m} cp I_{PTCi}}{m}$$
(3)

where общ $I_{P\Gamma C}$ - general public sector performance index;

 $\sum_{j=1}^{m} \mathrm{cp} I_{\mathrm{P\Gamma C}i}$ - the sum of the index values for the public sector;

m - number of sections.

This methodology can be used to improve the efficiency of the public sector, for which we propose to compare the performance indicators of state enterprises on the basis of statistical data for several previous periods of activity:

- 1. Determine the indicators presented in the table for several (2 3 5 10 years) periods of activity.
- 2. Next, calculate the average index $\Phi_{\pi i}$ for the period according to the formula::

$$\Phi_{\Pi j} = \frac{\Sigma_1^t \Phi_j}{T} \tag{4}$$

where $\Phi_{\pi j}$ - j - th average for the period T, where i =1, 2, 3,n;

n – number of indicators;

 $\sum_{i=1}^{t} \Phi_{i}$ - the sum of the j - th indicators for the period T, where t = 1, 2, 3, ... T.

3. Then compare actual performance in each reporting period with that of the previous period.

3. Result

To compare the efficiency of the public sector, depending on the ongoing transformation of the public sector, the analysis was conducted from 1999 to 2017. The entire analyzed period was divided into two stages. The first stage is from 1999-2012 (a rather intensive period of privatization), the second phase is from 2013-2017 (a decrease in the intensity of public sector transformation processes).

Table 1 presents the results of the calculation of the efficiency of the public sector in the first and second stages of its transformation.

Table 1

Performance indices of the functioning of the public sector in the first and second stages

Indicator	1 stage	2 stage
Access to R & D and technology	1,16	1,01

Access to capital	1,01	1,2
Market conditions	1,61	0,85
The quality of economic policy	1,14	0,93
Institutional conditions	1,32	1,06
TOTAL	1,25	1,01

An analysis of the results obtained allows us to conclude that the maximum results were obtained at the first stage, when the delayed effect of the transformation of the public sector was fully manifested (Fig. 2).

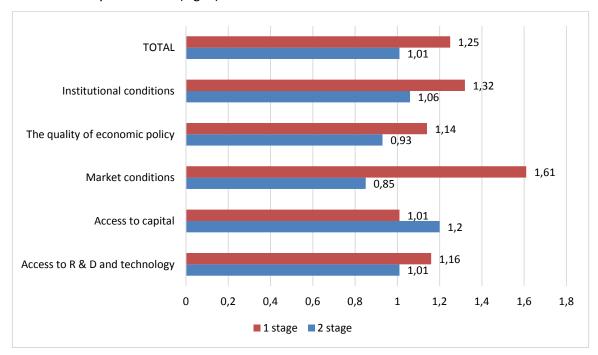


Fig. 2. Average indices of public sector performance in the first and second stages

The deviation of current indicators from previous shows strategic directions that need to be
adjusted. This allows to structure and systematize the process of transformation of the
public sector, focusing not only on the internal needs of society, but also public sector
companies.

The presented methodology for assessing the transformation of the public sector meets the general requirements that are traditionally imposed on indicators and performance criteria. In this case, the useful effect (result) of public sector activity is taken into account in several aspects: economic, social, political, institutional.

4. Discussion

The processes of transformation of the public sector are set different goals and objectives.

The economic tasks include the following: the growth of state revenues; reduction of government obligations; cost reductions in the public sector; improving the efficiency of enterprises acting as objects of transformation; attracting private investment resources to the development of the national economy, which is, expanding the possibility of public participation in socio-economic processes.

The lack of efficiency of the public sector and the implementation of its transformation processes, associated with the need to improve the level of performance of the public sector, determines the need for continuous evaluation and monitoring to improve efficiency.

The methodology for assessing the performance of the public sector can serve as the basis for the formation of a monitoring system depending on the dynamics of indicators, thus realizing the goal of the public sector through specific goals reflected in the indicators. The social characteristics reflected in the integral indicator assess the compliance of the results of the functioning of the public sector with the needs of the population, and the economic indicators of the savings and benefits obtained by optimizing the scale of the public sector. Thus, the directions of economic policy to improve the efficiency of the public sector by changing the relations and ownership structure should be implemented in the following areas:

- maintaining the optimal scale of the public sector while maintaining a significant proportion of state-owned enterprises that maintain national security;
- increasing the role of state order;
- development of the mechanism of public-private partnership;
- the introduction of a policy of protection for enterprises of strategic importance;
- return to state ownership of enterprises that have not fulfilled their obligations, with a low level of efficiency.

Improving the efficiency of the public sector will allow:

- improve the quality of services and products of enterprises;
- reduce the price of products and services;
- improve the profitability of the public sector and increase revenues to the state budget;
- improve the business environment and investment climate, providing equal opportunities for the private and public sectors.

The successful functioning of the public sector means that the state acts as an active owner of public assets. Through its institutions, the state sets targets for the public sector, demanding the effective implementation of economic activity and obtaining proper results.

5. Conclusions

A study of the theoretical foundations and practical aspects of the public sector research in the economy made it possible to determine the current state, to identify the key problems in the transformation of the public sector in Russia. Summing up, we can draw the following conclusions:

Modern economic conditions characterized by serious challenges to the geopolitical and geo-economic situation in the world imply the need to improve the efficiency of the public sector, since its activities affect the development of the national economy and society as a whole.

The public sector today is characterized by constant transformation, which is associated with changes in the regulatory framework, the scale of the public sector, its functional role, areas and activities. Efficiency problems in the public sector exist because of the obsolescent and physically obsolete fixed assets, the insufficient level of resource efficiency, and the instability of economic development.

The functional role of the modern state should be based on a democratic political system and the creation of a good quality of life for all citizens through the protection of human rights, the application of the rule of law and minimal government intervention in the social and economic spheres.

Thus, public sector transformation processes should be considered in the context of its efficiency and quality, and the growth of efficiency and quality depends on improving the functions of the public sector and choosing strategic directions for the development of the national economy.

References

1. Atkinson, E. B., Stiglitz, J.F. *Lekcii po ehkonomicheskoj teorii gosudarstvennogo sektora* [Lectures on the Economic Theory of the Public Sector]. Moscow, Aspect Press, 1995, 832 p.

- 2. Auzan A.A. Alternative strategies to optimize government regulation. *Zhurnal novoj ehkonomicheskoj associacii* [Journal of New Economic Association]. 2014, No 3 (23), pp. 154-157.
- 3. Balatsky E. V., Konyshev V. A. *Rossijskaya model gosudarstvennogo sektora ehkonomiki* [The Russian model of the public sector of the economy]. Moscow, CJSC "Publishing" Economy ", 2005. 390 p.
- 4. Balatsky E.V. Problems of assessing the scale and effectiveness of state participation in the economy. *Vestnik Moskovskogo universiteta Seriya 6 Ehkonomika* [Moscow University Bulletin. Series 6: Economy]. 1997, No 6, pp. 22-44.
- 5. Glazyev S.Yu. *Strategiya operezhayushchego razvitiya Rossii v usloviyah globalnogo krizisa* [The strategy of advanced development of Russia in the context of the global crisis]. Moscow, Economy, 2010. 255 p.
- 6. Kazantseva E.G. Problems of transformation of ownership relations in the Russian oligopolistic markets. *Izvestiya UrGEHU* [News of the USEU]. 2010, No 3 (29), pp.53-58.
- 7. Makarenko O.S. The structure and prospects of development of the public sector of the Russian economy. *Vestnik VolGU Seriya 3 Ehkonomika Ehkologiya* [Bulletin of the VolSU. Series 3: Economy]. Ecology. 2016, No 1 (34), pp.115-122.
- 8. Marshall A. *Principy ehkonomicheskoj nauki* [Principles of economic science]. Moscow, 1993.
- 9. Musgrave, R. A., Musgrave, P. B. *Gosudarstvennye finansy teoriya i praktika* [Public Finance: Theory and Practice].Moscow, Business Atlas, 2009. 716 p.
- 10. Melnikov D.V. Features of the transformation of property relations in Russia. *Vestnik YUUrGU Seriya EHkonomika i menedzhment* [SUSU Bulletin. Series: Economics and Management]. 2015, No 2, pp.128-134.
- 11. Mill D.S. *Principy politicheskoj ehkonomii* [Principles of political economy].1848.
- 12. Mirontseva, AV, Mirontsev, R.N. Privatization in Russia: a reset. *Finansovaya analitika problemy i resheniya* [Financial analytics: problems and solutions]. 2015, No28 (262), pp.30-38.
- 13. North D. *Instituty institucionalnye izmeneniya i funkcionirovanie ehkonomiki* [Institutions, institutional change and the functioning of the economy]. Moscow, Foundation of the economic book "Beginning", 1997, p. 68

- 14. Nureev R.M. *Rossiya osobennosti institucionalnogo razvitiya* [Russia: features of institutional development]. Moscow, INFRA-M, 2017. 448 p.
- 15. Petty U. *Traktat o nalogah i sborah Verbum sapienti slovo mudrym Raznoe o dengah* [Treatise on taxes and fees. Verbum sapienti is a wise word. Miscellaneous about the money]. Moscow, Os-89, 1997. 112 p.
- 16. Pozhilov D.M. The transformation program in the Russian Federation and the specifics of its assessment. *Vlast* [Power]. 2014, No 1, pp.39-40
- 17. Polterovich V.M. Privatization and rational ownership structure. Part 2. Rationalization of ownership structure. *EHNSR* [ENSR]. 2013, No 1 (60), pp.7-24
- 18. Popkova E.G. *Ehkonomicheskij rost v rossijskih regionah problemy transformacii kachestva* [Economic growth in the Russian regions: problems of quality transformation]. Moscow: Knoruss Publishing House, 2012. 279 p.
- 19. Ricardo D. *Nachala politicheskoj ehkonomii i nalogovogo oblozheniya* [Beginnings of political economy and taxation]. Moscow, Gospolitizdat, 1955. 339 p.
- 20. *Rossiya v cifrah* [Russia in numbers]. 2018: A brief stat. Collection. Rosstat. Moscow, 2018. 522 p.
- 21. Smith A. *Issledovanie o prirode i prichinah bogatstva narodov* [Study on the nature and causes of the wealth of nations]. Moscow, EKSM0.2007. 960 s.
- 22. Sukharev, O.S. Institutional theory of transformation and nationalization of assets. *JIS* [JIS]. 2015, No 1, pp.59-78
- 23. Tertyshny S.A. The impact of changes in the ownership structure in the Russian economy on the formation of a national model of corporate governance. *Zapiski Gornogo instituta* [Works of Mining Institute]. 2011, No 1, pp.191-196.
- 24. *Trud i zanyatost v Rossii* [Labor and employment in Russia]. 2017: A brief stat. Collection. Rosstat. Moscow, 2017. 261 p.
- 25. Shakhovskaya, L. S. *Ehkonomicheskij rost teoriya istoriya sovremennost* [Economic growth: theory, history, modernity: monograph]. VolgGTU.- Volgograd: RPK "Polytechnic", 2003. 248 p.
- 26. Sheremetyeva L.N. People's privatization in Russian: estimates and conclusions. *Universum obshchestvennye nauki* [Universum: social sciences]. 2014, No 3 (4), pp.2.
- 27. Findlay R. Government, Trade, and Comparative Advantage. The American Economic Review, 1992.

- 28. Hicks J. A contribution to the theory of the trade cycle. Oxford, 1950. Ch. VI. P.65-82.
- 29. Melnikova T.A., Demchenko S.K., The methodology of developing the system of indicator to evaluate the socio-economic development efficiency. *Zhurnal Sibirskogo federalnogo universiteta Seriya Gumanitarnye nauki* [Journal of the Siberian Federal University. Series: Humanities]. 2015, Vol. 8, No 11, pp. 2356-2384.
- 30. Rodrik D. Globalization, social conflict and economic growth. International Political Economy John F. Kennedy School Of Government Harvard University. 1997. 21 p.
- 31. Wagner A. Grundlegung der politischen Ökonomie. Leipzig: C.F. Winter, 1892. P. 929.
- 32. Stiglitz J.E. Economics of the Public Sector. NY, London, 1995.