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# ECONOMIC SUSTAINABILITY OF STATE-OWNED ENTERPRISES AS BASIS OF SUSTAINABLE ECONOMIC DEVELOPMENT

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## Abstract

The main purpose of the paper is to analyze the problems of effectiveness improvement, sustainability and development of Russian state-owned enterprises. Factors that affect economic sustainability of complex social and economic systems are revealed. The authors classify the factors of economic sustainability of state-owned industrial enterprises. The inconsistency of the institution of state-owned corporations is analyzed, its role and specific character are revealed, resources and possible drawbacks of state-owned corporations are shown in the contexts of modernization processes in the Russian Federation. The essence of the concept of sustainability is considered from the perspective of systems theory and system analysis. The necessity to increase the economic sustainability of state-owned enterprises under the conditions of imperfect government control and uncertainty of the external environment is justified. The authors emphasize urgency and reasonability of forming conditions to increase the effectiveness and sustainability of the functioning of state-owned corporations which were established to ensure the strategic interests of the state in the economic sphere.

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Keywords: State-owned corporations; sustainability; economic development.

## 1. Introduction

The relevance of the study is conditioned by the fact that it is necessary to increase the sustainability and predictability of Russian state-owned corporations which appear to develop in Russia. Development



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of state-owned enterprises is conditioned by the fact that it is necessary to ensure strategic interests of the state in the economic sphere and to solve vital social and economic problems that require huge investments. State corporations are rather contradictory phenomenon, because they represent an institution which performance is based on standards laid down by the public sector, but they develop and act as a corporate structure and the major objective of this structure is to implement priority projects and to solve problems of economic modernization using state property. This area is gaining much importance in the recent days.

## 2. Methods

Different approaches to the research of the essence of state-owned corporations determine the existence of several methodologies for their analysis. Normally, the essence and the role of state-owned enterprises and the prospects for their economic development are considered from the standpoint of institutional analysis which allows us to reveal their institutional nature and represents the state-owned corporation as a result of modernization of the institutional economic environment through the introduction of market forms and mechanisms. From the methodological point of view the analysis which is based on the provisions of the theory of institutional matrices is more complicated. Applying the theory of institutional matrices in the paper we proved that from the point of view of this theoretical scheme state-owned enterprises represent a consistent and long-term institutional form that meets the challenges and needs of structural and innovative modernization of the country.

The establishment of state-owned corporations in Russia in the early 2000s was a kind of response to the challenges of modernization and the risks of investing financial resources in large-scale projects. It was planned that the established state-owned enterprises would become a key "breakthrough points" in the domestic economy. Legislation of the Russian Federation assumes that state-owned companies can be established in any significant sectors where state interest is widely represented. To achieve this goal it is necessary to prove that this organizational form is more optimal considering the criteria of the possibility of realization of strategic interests of the state as well as mobilizing significant amounts of capital and accumulating it for breakthrough or socially significant spheres of development.

#### 3. Results

Formally, a state-owned corporation is a non-profit organization that assumes the obligation to use efficiently managerial, financial, material and other resources that are granted to it to a greater extent pursuant to Russian federal law. For instance, public joint-stock companies with 100% state participation receive less than state-owned companies. Thus, based on the analysis we can assume that at the present stage of economic development state-owned corporations represent the least risky way to meet the challenges and the needs of social, structural, technological modernization of the country. Therefore the number and total capacities of state-owned enterprises are likely to increase.

#### 3.1. The state role in ensuring sustainable development of the country

The state is a market agent like all others. Like any other market player, the state has scarce resources that it spends on maximizing its utility. But, unlike ordinary market players, the state - though using the

resources obtained from them - aims at maximizing the social utility, not individual ones. It is within this context that the main principles of contemporary state behaviour should be considered. This approach allows not only the adequate evaluation of the role of a state in different spheres of its functioning but also, applying the Pareto scheme, the formulation an important definition relating to the criterion of its activities. The behaviour of a state is considered rational if it implements Pareto-improvement while maximizing the social utility (Grinberg, & Rubinstein, 2010).

The former manager of the World Bank J. Wolfensohn said that "the history repeats insistently, that good government is not a luxury, [but] a vital necessity for development. Sustainable, economic and social development is impossible without an effective state" (Osadchaya, 2002).

State property is the economic basis of the state that enables it to carry out important economic, social and political functions. The importance of the state is not only to compensate for perceived market failures, but also to perform functions related to its exclusive prerogative. These functions involve "the balancing of public interests, social stability and protection of national interests conducting both domestic and foreign policy" (Abalkin, 1997).

An optimum share of the state in economy is determined by the state quota (it is the ratio of public investment to GDP). The share of the state in Russian economy is 29%, and in developed countries the share reaches 50%, but it is not an evidence of the state capitalism.

According to official sources which characterize quantitative parameter of the state property, we can conclude that the presence of the state property in Russian economy is being reduced (see the table 1). The number of business entities with the share of the state in the capital (without joint-stock companies with so-called golden share right that gives the government the right to influence company decisions without having a share in it) changes gradually. The dynamics in recent years is shown in the table below:

**Table 01.** The dynamics and structure of business entities with the share of the state in the capital (without joint-stock companies with so-called golden share right that gives the government the right to influence company decisions without having a share in it) in 2012-2015 (Mau V. et al.; ed. Sinelnikov - Murylev S.(. Ch ed.), Radigin A., 2015, 2016).

Date	Business entities (Joint-stock companies and LLC) with the share of the state (Russia) in the capital									
	Total number	share, %	share of the state in the statutory capital							
			100%		50-100%		25-50%		Less than 25%	
			num.	%	num.	%	num.	%	num.	%
For 01.08.2012 (for JSC): Federal Agency for State Property Management has unlimited rights of shareholders	2629	100	886	64,6	76	5,6	211	15,5	198	14,5
For 01.08.2013 (for JSC): Federal Agency for State Property Management has unlimited rights of shareholders	2337	100	1256	53,7	100	4,3	227	9,7	754	32,3

The table indicates a decrease in the share of companies influenced by the state due to the fact that its participation in the statutory capital of the organizations is reduced, as well as the fact that the economic policy is aimed at reducing the role of the state and its presence.

However, the decrease in the number of state organizations (institutions, unitary enterprises, enterprises with state participation) is not identical to the reduction of the share of the public sector, primarily through the establishment of vertically integrated structures such as public corporations.

Establishment of Russian state enterprises as a legal entity form is not a legislative innovation on a global scale. According to the legal documents of developed countries in Europe and in the US such organizations (public entities) have been existed for more than two centuries (Suyazov, 2002).

For instance, in the UK, the state corporation was once chosen as a legal form of the industries affected by nationalization. Most of the UK's major strategic industries and public utilities were nationalized between 1945 and the 1980s. The Coal industry was nationalized and 800 coalmines were taken under public ownership and a National Coal Board was established. British Petroleum Company and Central Board for electricity generation were nationalized as well. Steel was first nationalized in 1951 (Chernoy, 2011). A significant part of British industrial assets became the subject of full or part nationalization to be established as a legal form of public corporation (Zeldner, 2007). These companies were nationalized to ensure smooth market functioning and to deal with market failures occurred during the Great Depression in 1930s. Nationalization ensured a coordinated approach for the development and regulation of industries in which existing opportunities of private capital were clearly insufficient for their modernization and successful competition in the global market. Later, it became apparent that many of the nationalized industries ran into difficulties. The major problem is that the industries were managed ineffectively.

The president of the United States, Franklin Roosevelt supported the establishment of big public corporations. He argued that "economic development is a function of private enterprise and private capital, but there are exceptions to every rule and they require the establishment of enterprises owned by the public and managed by the Government, namely public corporations. The mission of the state corporation is to provide certain public services under the conditions which cannot be provided by private enterprises" (Alekhine, & Zakharov, 2007). Federal Deposit Insurance Corporation, United States Postal Service, the Alaska Permanent Fund are state-owned corporation.

Japan devastated after World War II and in 1950s the corporations "keiretsu" were established almost entirely by the resources of the state to implement the national priority programs. "Keiretsu" was established to achieve a particular goal, they sought new markets for keiretsu companies, helped incorporate keiretsu companies in other nations and signed contracts with other companies around the world to export commodities produced by Japanese industry. Although some of the established corporations of early days were eliminated as soon as they achieved their goals (in particular, some of the largest corporations were eliminated in 2005), in Japan there are more than 70 major non-profit organizations which have the status of state-owned corporations (Chernoy, 2011).

The Chaebol structure was established in Korea in 1960s – 1980s as a prototype of public corporations established and controlled by the state. Many economists believe that the structure of "chaebol" was borrowed from the Japanese model of development. While the chaebol structure is often compared with Japan's zaibatsu business groups, there are some fundamental differences between the two.

The most important difference is property relations in the banking system: zaibatsu have a lot of credit opportunities, because they work with the banks which they actually own whereas "chaebol" are not the owners of controlling stakes of the banks and work only with the state-controlled credit institutions. Chaebol are generally controlled by their founding families, while zaibatsu are run by professional managers. Chaebol ownership is also centralized, while zaibatsu are decentralized. "In the 1960s the government subsidized "chaebol" actively promoting their monopoly concentration; in the 1970s the

government provided massive financial support to speed up the development of heavy and chemical industries; in 1980s the government directed the activity of "chaebols" towards a dramatic expansion of the export market. South Korea increased its GDP for the period from 1962 to 1989 (less than 30 years) from 2.3 to 205 billion dollars, it increased the average annual income from 87 dollars to 4830 dollars, South Korea economy grew at 8% rate " (Republic of Korea: achievement of coming up development, 2006). Samsung, Hyundai and LG Group are among the biggest and most prominent chaebol. These chaebol are the leading factor in Korean economy development. In 1998, they accounted for 46 per cent of total sales of industrial sector of South Korea (Kang, & Chul-Kyu, 1997). Chaebol became a successful tool for the development of the economy of South Korea after a long stagnation. The effectiveness of Korean "chaebol" is based on their involvement in the implementation of public policies aimed at stimulating economic growth.

Thus, many countries of the world (South Korea, the USA, Canada, Japan, and Germany) establish state-owned corporations, independent foundations, and development banks for the implementation of priority programs, namely public financial resources which are used for the implementation of the important social and development programs and projects. State-owned corporations of developed countries close down when the economic sector reaches the world level of competitiveness and is able to perform tasks aimed at development without state support.

We can claim that we have experience of successful use of the state corporation as an institution of industrialization and modernization of the economy, the post-crisis regulation measures and actions of the state which ensure competitiveness of socially necessary segment of the economy which is not attractive for private business.

Russian sate corporations were originally established for the implementation of very expensive projects which were specific but necessary for the country. The drawbacks of state corporations as a modern institution and the economic and legal phenomenon include the following:

- when a state corporation is established, gratuitous transfer of state property is made. However, it is difficult to control the property of the state due to a number of legislative gaps;
  - asset management principles of state corporations are not well-developed, it involves additional risks;
- "non-market nature", less flexibility and management efficiency in comparison with private companies;
- the activity profile of the majority of state-owned corporations complicates the government's control over them as it implies implementation of unique projects which do not have analogs;
- the risk of corruption opportunities and manifestation of monopoly position of state corporations result in monopoly pricing.

Moreover, at the stage of the regulatory structure development, a clear definition of the institute of state-owned corporations has not been given and its objectives have not been clearly specified in the process of the establishment of state corporations. It subsequently led to a blurring of criteria for their establishment and the uncertainty in the mechanism of their activity. Consequently, state-owned corporations suffer from the lack of efficiency and economic stability in the context of the modernization process in comparison with expectations.

Considering the state corporation through the prism of a system approach as an open social and economic system and as an element of a larger system of the country's economy as a whole, we can draw

the conclusion that if the state-owned corporation is economically sustainable, it will affect the sustainability of the economic system as a whole.

Let us analyze the concept of economic sustainability of the industrial state corporation. Concepts integral to the contemporary idea of "sustainability" have always been central to economics. The category of "sustainability" was borrowed by economists and researchers from the systems theory and systems analysis. In the area of technical systems, the sustainability of any phenomenon is its capacity to keep the forms of its existence long enough and with sufficient accuracy, the loss of capacity leads to its disappearance (Abragyan, 1991; Raizberg, 2011). Economic sustainability of the economic system in the market environment reflects the nature of its condition; it specifies the focus of its movement in the foreseeable future. It combines the various properties of the system and the essential elements of its commercial and industrial activity, including product quality, scientific and technological development, conditions for maintaining the material and technical base, it ensures sustainable provision of resources, the development of human and intellectual potential, the availability of effective management.

According to this approach, economic stability can be specified as the ability of the economic system to maintain the trajectory of its development and achieve the strategic objectives considering the possible effects and adverse consequences of external and internal processes.

According to the basic principles of the theory of systems, every system including economic one tends to equilibrium. It is difficult to achieve equilibrium, as the optimum of the system depends on various factors.

In economics, a factor is interpreted as "the driving force of economic and industrial processes that affect the result of the production and economic activity" (Zhigalova, 2007). In the framework of this research, we consider factors as impulses and driving forces which help to convert the resources of industrial public corporations into the necessary benefits and results of activity.

## 3.2. Classification of factors of economic stability of industrial public corporations

There are many types of theories which take into consideration various approaches to classify sustainability factors of enterprises which depend on the chosen criterion for decomposition. Traditionally, factors are classified into the following groups:

- Considering the structure of influence:

system factors are factors that affect both internal and external communications of enterprise security devices. These factors are particularly destructive and the integrity of the system can be completely destroyed under the influence of these factors;

structural factors influence individual elements of the system. The effect of these factors may destabilize the individual subsystems, but the whole system continues its vital functions;

elemental factors affect the individual divisions of the enterprise. Generally, they are constant and can be dangerous if multiple factors occur at the same time or if they have cumulative effect.

- Considering the nature of focus:

factors of direct action, when there is a cause and effect link between adverse factors and the sustainability of the system;

factors of indirect action when cause and effect links are not obvious.

#### - Considering causes of occurrence:

natural factors have negative influence, they are not intentional actions of economic agents and occur spontaneously;

Intentional factors are negative factors which are deliberate actions of economic agents aimed at benefit obtainment etc.

Analyzing economic systems, the authors propose to investigate in more detail the two groups of factors that affect the economic sustainability of the system: internal and external ones. However, we believe that the generally recognized decomposition of factors into internal and external ones should be supplemented by the indicator of objectivity of their occurrence, which will make it possible to distinguish them from the conditions of the economic sustainability of the enterprises and corporations. We want to emphasize that to achieve the objective of our research it is important to distinguish "factors" and "conditions" of economic sustainability of public corporations. Conditions are the circumstances that affect the environment in which the corporation operates and develops. In contrast to the factors conditions are largely objective circumstances. Therefore, if the conditions for sustainable performance of public corporations can be purposefully created, generated and modified, certain factors can only identify and forecast. Factors occurring in the present can later become the basis for the formation of appropriate conditions for sustainable functioning and development of state-owned corporations: the concentration of resources for strategic priority projects; procurement of additional equipment; the formation of the necessary information and communication environment so that they become the prerequisites and conditions for corporate development in the future.

Classification of factors of economic sustainability of public corporations can rarely be found in Russian economic literature. Russian economists do not differentiate factors and conditions for development. Some attempts to systematize the factors of economic sustainability of the enterprises are taken by researchers (Afonasova, 2015).

The lack of the system approach to the complex of the factors affects the sustainability of the performance and development of industrial state corporations and hampers the development and implementation of effective instruments and mechanisms for the control of large corporations realizing priority projects in strategic sectors of economy. Establishment of an adequate classification system of factors of economic sustainability for state corporations, system's analysis and consideration when specifying industry's development strategy will create simple mechanisms for the effective management of the activities of public corporations. Moreover, it will create favorable conditions for the improvement of state corporations' effectiveness and efficiency and it will make it possible to use available resources more effectively.

## 4. Conclusion

In conclusion, we want to emphasize that the industrial state corporation is a complex social and economic system. To ensure its long-term competitiveness and economic sustainability, it is necessary to control effectively its activity and it is important to respond timely to different factors which have various intensity, sources, nature and methods of influence. We are talking about the elimination (or at least smoothing) of the adverse effects of negative and destimulating factors and the use of positive, stimulating factors that affect growth and development. Analysis of the combination of factors of economic

sustainability makes it possible to assess the condition of the internal and external environment of industrial corporations from the perspective of the need to improve their effectiveness, create favorable conditions for the normal performance and development of state industrial corporations.

#### References

- Abalkin, L. (1997). The state's role in the formation and regulation of the market economy. *Problems of Economics*, 6, 2-9.
- Abragyan, K. (1991). *Introduction to the theory of stability of motion on a finite time interval.* Moscow, Russia: Nauka.
- Afonasova, M. (2015). Concept of regional economy restructuring in the context of a problem of overcoming of inertia of social and economic development. *The Social Science*, 9(10), 2206-2212.
- Alekhine, B., & Zakharov, A. (2007). State Corporation. Russian Economy: XXI century, 20, 38-41.
- Chernoy, L. (2011). Does Russian economy need public corporations? The Economist, 4, 3-9.
- Grinberg, R., & Rubinstein, A. (2010). Economic Sociodynamics. Berlin, New York: Springer.
- Kang, Chul-Kyu. (1997). "Diversification Process and the Ownership Structure of Samsung Chaebol." In Beyond The Firm, edited by Takao Shiba and Masahiro Shimotani. New York: Oxford University Press. Retrieved September 10, 2016, from http://www.bookrags.com/research/chaebol-ema-01.
- Mau, V., & Radigin, A. (2015). Russian economy in 2014. Trends and Prospects. *Gaidar Institute for Economic Policy*, 36. Moscow, Russia: Publishing House of Gaidar Institute.
- Mau, V. et al.; ed. Sinelnikov Murylev, S. (. Ch ed.), Radigin, A. (2016). Russian economy in 2015. Trends and Prospects. *Gaidar Institute for Economic Policy*.37. Moscow, Russia: Publishing House of Gaidar Institute.
- Osadchaya I. (2002). Globalization and the state: the new regulation in developed economies. *World Economy and International Relations*. 11, 2-8.
- Raizberg, B., Lozovsky, L., and Starodubtsev, E. (2011). Modern economic dictionary. Moscow, Russia: INFRA-M.
- Republic of Korea: achievement of coming up development. (2006). Retrieved September 22, 2016, from www.mgimo.ru/fileserver/2004/kafedry/mirec/prog-mirec2006\_11-market-dem6.doc.
- Suyazov E. (2002). Proceedings of the Russian Academy of Legal Sciences, 2 (2), 163-164.
- Zeldner A. (2007). Conceptual approaches to strategy and tactics of state regulation of the economy. In the post-war period British public corporation were established considering the American model which was chosen as the main organizational and legal form for industries affected by nationalization, Moscow, Russia: IE RAS.
- Zhigalova V. (2007). Increase of the capacity of the economic sustainability of the enterprise: Author's summary, Tomsk, Russia:TUSUR.