

CDSSES 2020**IV International Scientific Conference "Competitiveness and the development of socio-economic systems" dedicated to the memory of Alexander Tatarkin****PATH DEPENDENCE AND ITS INFLUENCE ON SOCIO-ECONOMIC MODERNIZATION IN RUSSIA**

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Abstract

The article examines the problem of "path dependence" on Russia's existing institutional structure and the possibility of socio-economic modernization. The urgency of the specified problem lies in the fact of political elite's (directly or indirectly interested in the existing distribution of national income from the sale of energy resources) unwillingness to abandon the rental economy make any significant social transformations unlikely. Existing close relationships of political and economic institutions in modern Russia has led to their mutual stagnation and made it impossible for bifurcation points to emerge due to the entire system's inertia. The study's aim is to solve the problem of political and economic institutions' stagnation, socio-political and socio-economic modernization by analyzing key elements of "path dependence" in Russia, as well as institutional mechanisms of bifurcation points' emergence as one of the institutional development factors. The paper analyzes the consequences of mobilization development as one of the types of modernization that have been used in Russian history for the current structure of economic and political institutions. The article examines key factors of rent-oriented behavior and autocratic authority as patterns of "path dependence" in Russia's institutional structure, which also negatively affect the possibility of modernization. Based on the analysis, several options for carrying out socio-economic modernization (displaying the most successful cases in foreign countries) in Russia are proposed.

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Keywords: Conservative modernization, institutions, mobilization development, path dependence, rent-oriented behavior



1. Introduction

An issue of carrying out structural modernization in Russia and corresponding socio-economic transformations is more and more relevant in light of the conjuncture changes in global economic and political spheres. The system of public institutions, including political (social movements, parties, justice, law enforcement structures), economic (money, economic relations, banking system), social (marriage, family), spiritual (education, media, religion) institutions, require restoration and revision. The predominantly raw material structure of the Russian economy imposes significant restrictions on the possibility of using modern growth drivers (such as digitalization) (Fan & Anwar, 2020), as well as traditional ones (increase in the volume of traditional production factors – number of resources, number of employees, the volume of fixed capital), - does not allow to achieve significant economic growth. The result is a long-term stagnation of the economy, declining real incomes of the population, and inefficient economic sectors. The reluctance of the political elite (directly or indirectly interested in the existing distribution of national income from the sale of energy resources) to abandon the rental economy makes any significant social transformation unlikely. Tight bonds of political and economic institutions in modern Russia have led to their mutual stagnation and impossibility of launching large-scale transformations due to the whole system's inertia. Wherein, the frequency of modernization processes at some scale reflects the quality of public institutions – thus, examples of foreign countries (Great Britain, USA, Germany, Japan, China) indicate that stable socio-economic development requires periodic updating of the entire institutional system, foremost – political and economic institutions. At the same time, balance is highly required - if it is not achieved, society either in a state of stagnation or permanent chaos. Thus, the critical task is to identify and analyze factors affecting the possibility of implementing socio-economic modernization.

2. Problem Statement

The possibility of carrying out socio-economic transformations is directly related to relevant institutions that play a crucial role in uncertainty reduction by creating a stable interaction structure. They can be formal (normative legal acts, laws) and informal (habits, traditions). New institutions arise when conditions and rules of old ones do not lead to maximum efficiency. Thus, the success of reforms itself and the very need for any transformations and changes depending on institutional development level. One of key factors due to institutional development inhibition is a gap between formal and informal institutions (North et al., 2011). The very appearance of such gap can be explained by the different speed of adoption of certain rules and norms in society, their consolidation or rejection. Simultaneously, an inefficient norm that is fixed now as a working institution can significantly slow down institutional development in the future, as rejecting more effective analogues (Polterovich & Popov, 2007). This phenomenon is called "path dependence". The impossibility of modernization in many countries, Russia in particular, is associated with significant influence of "path dependence" at particular historical moments. In this case, the critical task is to identify the main factors of "path dependence" in Russia that affect the possibility of socio-economic modernization, analyze them, and, based on data received, formulate options for the implementation of modernization.

3. Research Questions

Tasks to be solved during the study: analysis of cases of socio-economic modernization in Russian history; highlighting key factors contributing to the emergence and consolidation of "path dependence" in Russia; formulation of options for implementation of socio-economic modernization in Russia.

4. Purpose of the Study

The aim of the study is to solve the problem of the stagnation of political and economic institutions, as well as socio-political and socio-economic modernization of Russia, by analyzing institutional mechanisms of emergence and consolidation of "path dependence" as one of key factors in the inhibition of institutional development.

5. Research Methods

Approaches used in the study are: the institutional approach (analysis of economic and political institutions as the basis of research; principles of new institutionalism; the concept of inclusive and extractive institutions); the interdisciplinary approach (research and analysis of scientific works in the field of political science (principles of organizing political power, self-government bodies), history (analysis of bifurcation points in history of Russia), psychology (paternalism as a factor of institutional development of political power and, as a result, social dependence of the lower strata of society), sociology (analysis of the interaction of people in society, identification of patterns and regularities in social reactions during periods of bifurcation). Suggested methods are general logical methods (analysis, synthesis, analogy) and empirical methods (comparison).

6. Findings

The problem of "path dependence" is an object of research in various scientific fields: economics, sociology, psychology, history, physics and other sciences. Liebowitz and Margolis (1995) generally define it as dependence of future state of the system (individual, society) not only on the current state, but also on a much earlier state. The influence of path dependence on economic and political processes (and institutions) is assessed as very significant as well. Thus, according to North, who defined institutions as a system of formal rules and informal restrictions that structure interactions between people in society (North et al., 2011), the presence of a significant gap between formal and informal institutions can act as one of reasons for inhibition of socio-economic development of society. At the same time, the very emergence of such an institutional gap, according to North, is explained by different speed of change and acceptance of principles and restrictions (that depend on the previous rules and norms) (North et al., 2011).

The foundations of "path dependence" concept were laid in the framework of the so-called qwerly-effect formulated by David and Arthur. In their opinion, a less effective standard will likely be consolidated over a more effective norm due to the influence of random circumstances and momentary market factors. The introduction of a new standard is partly (and in some cases, to a large extent) driven

by prior events. The phenomenon that gave name to qwerty effect was the massive use of keyboards with qwerty-layout, despite analogs' availability with more efficient (in terms of typing speed) key layout. Another example is the victory of the lower-quality VHS video recording format (developed by JVC) over Betamax (Sony). This was facilitated by several factors prevailing at the time these two formats entered the market:

- VHS videotapes were cheaper to produce, and it facilitated their expansion throughout the video distribution industry;

- more aggressive marketing of JVC;

- inability to identify a qualitative difference in formats for the mass consumer due to the low quality of video equipment and video signal transmission algorithms.

VHS format's victory shows that the influence of a specific set of factors that have developed at a particular moment in time is too high in the context of consolidation of a particular standard. At the same time, the main difference between path dependence and qwerty effect is that with path dependence the possibility of socio-economic changes is predetermined by choice made in the past; thus, historical consolidation, one way or another, prevails over the momentary impact of aggregate socio-economic factors.

Studying the modernization problem in Russia allows us to trace the apparent influence of path dependence. During the evolution and development of social processes in Russia, there attended so-called mobilization breakthroughs, which define as the accumulation of resources of the whole society to achieve a national goal, caused by the need to respond to foreign policy challenges (aggression, more frequently). It resulted in a system of "power-property" (Pliskevich, 2016), using extensive development mechanisms and resource rent withdrawal as the primary source of income. Throughout Russia's history, two significant modernizations resulted in the emergence and consolidation of inefficient norms and standards, carried out on the principle of a modernization breakthrough.

It is necessary to understand that the implementation of mobilization breakthroughs requires a society with strong centralized power, which negatively affects the possibility of balancing institutional development. Thus, reforms of Peter the Great were more of his reaction to military defeats against Turkey for influence in Azov sea; were carried out according to the principle of a mobilization breakthrough and led to negative consequences in terms of building and developing stable institutional structure. Even before the start of Peter's reforms, there were prerequisites in economic and domestic political spheres, which indicated the possibility of gradual evolutionary changes (Klyamkin, 2007). However, urgent need to conduct permanent military operations, caused by the emperor's ambitions, led to a forced socio-economic development and mobilization breakthrough. The necessity to select priorities destabilizes institutional development, creates distortions and inhibits social and economic development in terms of balance. Military reforms are incompatible with social transformations; they are two oppositely directed forces that inhibit each other (Klyamkin, 2007). The result of Peter's reforms and the successful reorganization of the national economy and army, creation of navy, was the strengthening of serfdom, flourishing of autocracy, and the emergence of bureaucracy institutions. Due to path dependence problem, strengthening of bureaucracy, as well as asymmetric development of social institutions, are

those fixed norms (standards) that are relevant even with the current set of formal and informal institutions.

As in case of Peter the Great's modernization, when there were prerequisites for gradual, evolutionary socio-economic development before the start of the mobilization breakthrough (leveled, however, by the idea of creating a military power and a "regular" state), Soviet (Stalin's) modernization probably initially had institutional conditions for systematic transformations (Balatskiy & Pliskevich, 2017). Ideologically, Soviet political mechanisms were actively opposed to western ones, but economic institutions were copied and effectively introduced into the national economy. The New economic policy (NEP), conducted from 1921 to 1928, introduced several market mechanisms characteristic of Western countries into the economy of the USSR: for example, the surplus appropriation system, that claimed confiscate to up to 80% of all agricultural production from peasantry, was replaced by a food tax (30% of production was being withdrawn, but peasants could sell the surplus); the card system was abolished, lease and opening of small private enterprises, hiring of labor were allowed. Due to path dependence consolidation, the period up to 1929 happened to be a bifurcation point when the path of further institutional development of Russia was determined (Pliskevich, 2016). Meanwhile, the unfavorable foreign policy conditions that had developed by the beginning of Stalin's modernization required another one mobilization breakthrough. In addition, constant pressure of the lower strata of population, representing a significant mass and accustomed to social dependency during the period of serfdom, became a prerequisite for creating an administrative command system.

Subsequent socio-economic reforms resulted into accelerated industrialization, collectivization of rural population and their unification into state farms, development of tough five-year plans to achieve economic indicators. Thus, another mobilization breakthrough led to the strengthening of state institutions, destruction of social capital, elimination of market economic institutions, and imbalance in institutional development.

Two massive modernizations, that took place in Russian history, made it possible to highlight two key institutions (as a legacy of mobilization breakthroughs) that affect the possibility of large-scale modernization nowadays – they are rent-oriented behavior and autocratic authority.

These two factors are conditioned by specific geographic location and internal political peculiarities of Russia. In particular, vast territories with different climatic zones (including those favorable for living and developing agriculture), significant natural resources, as well as large working-age population, in fact, predetermined the choice of rent-oriented behavior as the main economic model. In turn, the formation of absolutism of political power in Russia began as a reaction to the consequences of the Time of Troubles (1598-1613), when a strong centralized power was needed to stabilize socio-economic processes in society. Consolidation of autocracy was accompanied by termination of convocation of Zemsky Sobors - one of the few inclusive institutions of that time. Thus, these two factors predetermined the extensive path of development of the country, inhibiting the institutional changes necessary for socio-economic development, such as the emergence of private property, as well as the intensification of industrial production.

Rent-oriented behavior in the Russian economy is a serious problem from the point of view of institutional prerequisites for socio-economic modernization. The negative impact of this factor in

Russian economy is that if the amount of rent extracted in economy is significant, investor (beneficiary) would rather invest in rent, and not in production development (Polterovich, 2016). In addition to rent-oriented behavior, natural resources can be used on the principle of rent seeking. First is defined as "behavior aimed at obtaining super profits from the economic use of existing natural resources" (Latkov, 2007, p. 28). Rent seeking in its turn is the use of rental income to search for fundamentally new sources of rental income. One example of rent seeking is the United Arab Emirates (UAE), where oil export revenues are used to build and acquire real estate, buy and sell financial instruments, and develop tourism and innovation industries. Thus, we can say that, in contrast to rent-seeking behavior, the concept of rent-seeking does not have a negative connotation, since it presupposes a certain level of economic development and achievement of a certain economic efficiency.

Based on data obtained during the study, it is possible to propose several options for modernization with a subjective assessment of possibility of their application in Russia.

Historically, the most familiar and acceptable as for application experience is the model of mobilization development. Moreover, all the necessary attributes and conditions for that type of modernization (strong centralized power, regions dependent on the administrative center) are present (Zulkarnay, 2018). Nevertheless, usage of such a mechanism for the implementation of socio-economic transformations is unlikely due to favorable foreign policy environment - mobilization development requires a national goal (the presence of an external enemy) for the successful application of mechanisms for the accumulation and redistribution of labor and natural resources. In addition, despite Russia's lagging behind due to level of development of inclusive economic institutions (Acemoglu & Robinson, 2016), Russian economy retains principles of market relations, which are impossible in case of mobilization development. Moreover, precisely those spheres that currently need state support - small and medium-sized businesses, innovative production - will lag behind in the case of mobilization development.

Thus, the second option - conservative modernization - is more likely to be implemented in conditions of existing formal and informal institutions in Russia. Conservative modernization presupposes significant (structural) transformations in terms of economic and any other social institutions while maintaining (conserving) the existing political institutions. Thus, theoretically, it is possible to carry out economic diversification painlessly for the current political power. The disadvantage of conservative modernization is in fact that, from point of view of rental economy's beneficiaries, there are no strong incentives to change / improve economic institutions - the existing privileges for distribution and redistribution of rental incomes result in over-enrichment already. In this case, there is a risk of a scenario, which contains nominally declared policy of modernizing and diversifying economy while actually only lead to insignificant changes in beneficiaries.

From this point of view, the third option - rent seeking modernization - can be efficient in medium / long term. However, in this case, influence of path dependence could be especially pronounced. There are proves of path dependence's significant institutional influence on cases of two countries: UAE and Saudi Arabia. With UAE, there are highly extractive political institutions, but effective economic reforms have been carried out. But in Saudi Arabia, where, according to Vision 2030 program (aimed at transforming the kingdom's economy and getting rid of oil dependence), attempts are also made to

modernize the economy based on the rent-seeking model; however possible economic the effect is limited by the impact of historically developed extractive political institutions. Their presence is due to the specifics of the social structure (tribalism) and confessional contradictions (Shiite-Sunni conflicts) - thus there was a need for a strong centralized power. The negative effect of extractive economic institutions is manifested in most socio-economic processes in the country: the oil industry has been nationalized, there is a ban on rallies and lockouts, censorship in the media, tourism is underdeveloped, despite its potential.

The differences in the succeeding while applying the same approach to modernizing the UAE and Saudi Arabia is probably due to the fact that in UAE the influence of institutions that can be attributed to path dependence is to a certain extent leveled out by the greater inclusiveness of political institutions (there is a unique combination of republican and monarchical systems, a more pro-Western approach to leadership), due to its religious specificity does not impede the development of tourism and a flexible foreign policy; private sector of the economy is more developed. Thus, the strategy for implementing modernization like rent seeking in Russia should include solving the problem of rent-seeking behavior; if not, it risks to be ineffective.

Eastern type of modernization is the fourth option of a possible "modernization model" for use in Russia. Its peculiarity lies in the presence of centralized power during implementation of economic reforms. Successful cases of this type of modernization are countries of Southeast Asia, which have gone from developing to developed countries in last sixty years (the "Asian miracle" phenomenon).

Japan, which was under influence of occupying forces (primarily the United States) after World War II, nevertheless successfully demilitarized and demonopolized its economy; significant part of production started to function according to the principles of public-private partnership - the state set indicative goals for each industry and individual enterprises, the most unprofitable and depressed industries received significant governmental support. In the same time period, Japanese economy began to diversify and show significant growth in technological industries (Mozebakh, 2018). In South Korea, rule of General Park Chung-hee as a result of coup d'etat served as an incentive to modernize the economy. As a result of strengthening formal and informal institutions, it became possible to eliminate corruption, actively attract foreign capital, create large industrial and financial companies, achieve stable growth in merchandise exports and imports, and successfully diversify the economy (intensive development of heavy industry and innovative industries) (Novikov, 2017). The Chinese economy began to develop at a significant pace under the leadership of Deng Xiaoping and with the help of economic reforms in order to create a market economy with Chinese characteristics (that is, in a strong centralized government) in the 1970s (Borkova & Krivenko, 2019).

Thus, the existence of an authoritarian government and its readiness (and commitment) in renewal / change of economic and political institutions, in the case of modernization of eastern type, requires an appropriate level of development in informal institutions, as well as high level of accumulation of social capital - society should be susceptible to changes in economy, culture and other spheres of public life, as well as interested in such changes, support them. At the same time, it is necessary to have a feedback between political and public institutions - the state must strictly fulfill its assigned tasks and achieve the intended goals. We can say that high social responsibility of all participants in socio-economic processes allows for maximum efficiency due to implementation of modernization of the eastern type. If succeeded,

it results in an increase of well-being of population, expansion of middle class, and natural liberalization of political institutions. This is how it differs from conservative modernization, where political institutions and current ruling elite are untouchable, changes are subordinated to the achievement of supreme power's goals. Since this type of modernization requires high level of social capital accumulation, doubts arise about the possibility of its implementation in Russia, where the level of social capital is traditionally low (due to the atomization of society after two revolutions of the 20th century , and the authorities have no feedback from the population regarding to implemented socio-economic policy.

The fifth option for the implementation of modernization is "western" modernization, characterized by liberal socio-political processes, presence of market economy and fairly limited state intervention in social processes (Cetkovic & Buzogany, 2020). The problem of western type of modernization is that inclusive economic and political institutions in societies of a kind develop organically, based on natural evolution of social processes. Any attempts of artificial implementations of these institutions into inappropriate conditions result in collapse of reforms, as well as return to extractive institutions and their further strengthening.

Reforms of the 1990s in Russia, when rigid political and economic institutions have been replaced by their liberal counterparts, could hardly be assessed as optimal. Prices` liberalization, foreign trade, privatization of enterprises, division of authority into legislative, executive and judicial branches, the relative diversity of political forces, - all these institutions nominally had signs of inclusiveness. However, the reluctance to abandon the rental economy, as well as lack of social actions and its distrust of the authorities led to the stagnation of social and economic development. Transplantation (import) of institutions is quite possible, but only if there are appropriate conditions that can develop naturally, gradually. In turn, post-Soviet reforms should be spoken of as attempts to implement principles of private property and free market into a nationalized, low-diversified economy, as well as political pluralism in a unitary autocratic state. Thus, the existing institutional structure does not correspond to the principles of western modernization.

7. Conclusion

The research resulted in the following conclusions: firstly, rent-seeking behavior and the autocratic nature of political power are the most significant elements of path dependence in Russia in the context of influencing the possibility of socio-economic modernization and secondly, within this framework, possible options for the implementation of socio-economic modernization were formulated, indicating examples of their successful application, contributing factors, as well as a subjective assessment of the likelihood of their implementation in Russia: mobilization development (Russian Empire, USSR, Swedish Empire, German Empire), conservative modernization (Germany, Great Britain, France), modernization based on rent-seeking (UAE, Saudi Arabia, Kuwait), "eastern" modernization (Japan, China, South Korea), "western" modernization (USA, UK, France). The analysis results in institutional structures` specifics of the listed foreign countries, and their comparison with Russia showed that the most likely scenario is conservative socio-economic modernization and modernization based on rent-seeking.

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References

- Acemoglu, D., & Robinson, D. (2016). *Why nations fail*. Mocsow, AST.
- Balatskiy, E., & Pliskevich, N. (2017). Ekonomicheskiy rost v usloviyakh ekstraktivnykh institutov: sovetskiy paradoks i sovremennyye sobytiya [Economic growth in the context of extractive institutions: the Soviet paradox and modern events]. *World of Russia. Sociology. Ethnology*, 4, 97-114. <https://doi.org/10.17323/1811-038X-2017-26-4-97-117>
- Borkova, A., & Krivenko, A. (2019). Mirovaya fabrika. Ekonomicheskoye chudo Kitaya i yego uchastiye v mirovoy ekonomike [World factory. The economic miracle of China and its participation in the world economy]. *Moscow Economic Journal*, 8, 10-22.
- Cetkovic, S., & Buzogany, A. (2020). Between markets, politics and path-dependence: Explaining the growth of solar and wind power in six Central and Eastern European countries. *Energy Policy*, 139, 132-144. <https://doi.org/10.1016/j.enpol.2020.111325>
- Fan, Z., & Anwar, S. (2020). International migration of entrepreneurs and the emergence of economic development traps. *Rev Dev Econ.*, 1–17. <https://doi.org/10.1111/rode.12678>
- Klyamkin, I. (2007). *Rossiyskoye gosudarstvo: vchera, segodnya, zavtra* [The Russian state: yesterday, today, tomorrow]. Moscow, Novoye izdatel' stvo.
- Latkov, A. (2007). Osnovnyye modeli rentooriyentirovannogo povedeniya v sovremennoy ekonomike [Basic models of rent-oriented behavior in the modern economy]. *Bulletin of the Saratov State Social and Economic University*, 15, 28-32.
- Liebowitz, S. J., & Margolis, S. E. (1995). Path Dependence, Lock-in, and History. *Journal of Law, Economics, and Organization*, Oxford University Press, 11(1), 205-226.
- Mozebakh, V. (2018). Yaponskoye «ekonomicheskoye» chudo: sushchnost' i podkhody k ponimaniyu [Japanese "economic miracle": essence and approaches to understanding]. *News of Saratov University - New Series, History Series. International relationships*, 4, 495-499. <https://doi.org/10.18500/1819-4907-2018-18-4-495-500>
- North, D. K., Wallis, J., & Weingast, B. (2011). *Violence and social orders. Conceptual framework for the interpretation of the written history of mankind*. Moscow, Gaidar Institute Publishing House.
- Novikov, I. (2017). Ekonomicheskoye razvitiye Yuzhnoy Korei [Economic development of South Korea]. *Economy and business: theory and practice*, 4-2.
- Pliskevich, N. (2016). “Path dependence” i problemy modernizatsii mobilizatsionnogo tipa [“Path dependence” and problems of mobilization type modernization]. *Mir Rossii*, 2, 123-143.
- Polterovich, V., & Popov, V. (2007). *Ekonomicheskaya politika, kachestvo institutov i mekhanizmy «resursnogo proklyatiya»* [Economic policy, the quality of institutions and the mechanisms of the “resource curse”]. Moscow, SU—HSE.
- Polterovich, V. (2016). Instituty dogonyayushchego razvitiya (k projektu novoy modeli ekonomicheskogo razvitiya Rossii) [Institutions of catch-up development (to the draft of a new model of economic development in Russia)]. *Economic and social changes: facts, trends, forecast*, 5, 88–107. <https://doi.org/10.15838/esc.2016.5.47.2>
- Zulkarnay, I. (2018). Why Russia Has Again Been Sliding from Federalism to Unitarianism. *Public Administration Issues*, 5, 116–132. <https://doi.org/10.17323/1999-5431-2018-0-5-116-132>