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**IMPACT OF THE RESOURCE RENT ECONOMY ON THE SURVIVAL
OF AUTHORITARIAN REGIME**

SUMMARY OF THE DISSERTATION

for the purpose of obtaining academic degree Doctor of Philosophy in Political
Science

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Research design

Relevance of research topic

Research on the stability of authoritarian regimes, using quantitative methods, game-theoretic and predictive models, has appeared relatively recently in political science - most of them have been published within the last twenty years. Papers on the rental economy were written much earlier, but practically throughout the entire second half of the twentieth century, they were works on macroeconomics and economic theory. The institutional component of the resource economy becomes the subject of research only at the end of the XX - beginning of the XXI century.

The regime transformations of the second half of the last century showed how unstable the formation of democratic institutions in non-democratic regimes can be. By the end of the democratization waves, one of the topical areas of political science was research in the field of comparative analysis, then after the rethinking of the transit paradigm, the emphasis was placed on comparative studies of authoritarian regimes. One of the key subjects of such studies was the survival or stability of authoritarian regimes, which was ensured by various political institutions.

Thus, since the beginning of the 90s there are many theories and concepts explaining the survival of authoritarian regimes by the presence of political institutions, strategies of an autocrat, the specifics of an authoritarian regime and the economy. Studies on the institutional aspect of resource dependence have focused on the problem of the stability of a political regime with the possibility to maximize rent. There is a need for an in-depth study of this topic due to the presence of many problem areas caused by both the relative novelty of the approach to studying the stability of regimes, and the lack of uniformity in the operationalization of such concepts as "rent economy", "resource-dependent state", "resource-dependent economy". Hence the need to concretize the categorical apparatus and rethink approaches to quantitatively measuring resource dependence.

Some studies¹ show that resource wealth provides stability for authoritarian regimes. In authoritarian regimes, attempts by an autocrat to use rental income from natural resource extraction to control powerful people in a state lead to an increase in his tenure in power and an increase in

¹ Tsui K.K. More oil – less Democracy // *The Economic Journal*. 2011. Vol. 121. №551. P. 89-115.

Ross M.L. Does Oil hinder Democracy? // *World Politics*. 2001. №53. P. 325-361

Cuaresma J. C., Oberhofer H., Raschky P. Oil and the duration of dictatorships. // *Public Choice*. 2011. №148. P. 505-530.

Treisman D. Oil and Democracy in Russia // *National Bureau of Economic research*. 2010. January. [Электронный ресурс]. - URL: https://www.researchgate.net/publication/46467503_Oil_and_Democracy_in_Russia (дата обращения 01.11.2021).

Smith B. Oil wealth and regime survival in the developing World, 1960-1999 // *American Journal of Political Science*. 2004. Vol. 48. №2. P. 232-246.

Caselli F. Power Struggles and the Natural Resource Curse. // *LSE Research, London School of Economics*. 2006. [Электронный ресурс]. – URL: <https://personal.lse.ac.uk/casellif/papers/curse.pdf> (дата обращения 01.11.2021).

his support level. At the same time, the rental income can be used to retain power, for example, in the implementation of repression, which, with resource wealth, allows the government to strengthen internal security and suppress unrest. Under the same conditions, the course of modernization leads to the fact that the growth of the economy through the export of energy resources cannot bring about the social and cultural changes necessary for the successful establishment of a democratic government. Territorial states that depend on oil for their economies are less likely to make progress towards democracy². Such economies have a relative guarantee of receiving stable export earnings and do not strive for market diversification and political pluralism.

The political crisis that worsened at the beginning of 2019, as well as the ongoing economic downturn in Venezuela, showed that the ability of the state to maximize rents does not always contribute to the preservation of political stability, stable legitimacy of the current government, and economic security. In an undiversified economy, the political regime has risks of destabilization - depending on the prices for the retrofitting resource and the chosen political course, the autocrat makes political decisions on fulfilling the conditions of the social contract, ensuring a stable standard of living now and in the near future.

Over the past five years, Venezuela's Fragile State Index shows negative dynamics, increasing from 76.7 points in 2014 to 86.2 in 2018. The Fund for Peace ranks Venezuela among the countries where the level of threat to stateness was rated as "High Warning". In 2018, such rental economies as Nigeria (99.9 points, threat level - Alert), Angola (89.4 points, level of threat to statehood - High Warning) have higher indicators of "fragility". Nevertheless, we can observe authoritarian regimes, where indicators of state capacity are at a relatively acceptable (for authoritarian regimes) level: for example, in 2018 Saudi Arabia received 70.2 points (Elevated Warning), and Qatar is considered a very stable state - only 48.1 points.

Statement of research problem

The research problem is based on an idea, that such exceptions (for example, Nigeria, Venezuela) do not fit into the thesis that states rich in natural resources are more stable than those in which rent-forming resources are absent. Such instability can be expressed not only in the change of the ruling leader, but also in the change in the regime type - for example, the transition to an authoritarian regime of a different type or to democracy with an adjective.

² Teorell J. *Determinants of Democratization: Explaining Regime Change in the World, 1972–2006*. Cambridge University Press. 2010. 220 p.
Gandhi J., Przeworski A., *Authoritarian Institutions and the Survival of Autocrats // Comparative political studies*. 2007. Vol. 40. №11. P. 1279-1301.

We assume that the influence of resource dependence on the survival of an authoritarian regime we are investigating does not occur directly, but is moderated by “third” factors. This assumption is based on the junction of the ideas of the resource allocation problem, the concepts of a "stationary bandit" of M. Olson³, the principles of S. Huntington⁴ in relation to rental states - "No taxation - no representation" or "No representation without taxation", the state capacity in terms of C. Tilly⁵. Regarding the latter, it is worth noting that Tilly considers state capacity to be an important characteristic of the regime, which is the ability of the state to carry out political decisions or a declared policy.

The problem area is also the methodology for researching this issue, the choice of approach to sampling, variables and research method.

Research question and hypothesis

It seems possible to raise the **research question** as follows: if the rental income from natural resources in a resource rent economy is not always a sufficient condition for a stable stay in power of an authoritarian ruler, then what can be the factor (s) that determine the influence rent-based economy on the stability of authoritarian regimes?

Based on the idea that the ability of the state to extract resources imposes on it certain obligations to ensure the social contract, we believe that *it is not the volume of deposits of natural resources that matters, and not how strongly the national economy depends on these resources*, but how the political elite *uses rental income to secure a «social contract»*. The latter is understood as enacting political decisions, ensuring a high standard of living, providing public goods from the state. We **hypothesize** that the quality of government, which is expressed as an ability to pursue the declared policy, to effectively distribute public goods, is an additional factor within the influence of resource dependence on the stability of autocracy.

Literature review

Studies devoted to the influence of natural resources on the stability of an authoritarian regime are divided into two types: *by the object of research* - either the authoritarian regime in a particular state as a whole is analyzed (as the successive stay of autocrats in power), or a separate authoritarian ruler becomes the unit of research; *by the approach to operationalize* the stability of the regime – fix either the fact of the regime's recognition as an electoral democracy, or the fact of an unintentional loss of power by an autocrat followed by the start of the rule of another autocrat.

³ Olson M. Dictatorship, Democracy and Development // Political Science Review. 1993. № 7(3). P. 567-576.

⁴ Huntington S. The Third Wave: Democratization in the Late 20th Century, Norman: University of Oklahoma Press. 1991. P. 65

⁵ Tilly C. Democracy. Cambridge University Press. 2007. 234 p.

Most of the researches focus on the problem, whether oil wealth correlates with the level of democracy, rather than the impact of oil on the survival of an authoritarian regime⁶.

In the first case, studies show that states where economies depend on oil production are less likely to make progress towards democracy, since guaranteed income hinders economic diversification and political pluralism (M. Ross; J. Theorell⁷, J. Gandhi and A. . Przeworski⁸, K. Tsui⁹, P. Luong and E. Weintal¹⁰, T. Karl¹¹, F. Caselli¹²).

In the second case, the studies analyze the stability of an certain authoritarian regime (autocrat`s rule), studies show that the concentration of resource rent by the autocrat, as well as co-optation of the political elite, lead to an increase of his term in office (J. Cuaresma, H. Oberhofer and P. Raschky¹³, B. Smith¹⁴, F. Caselli¹⁵). In the Middle East countries, one can observe a situation of "buying" and assimilation of the opposition with the help of rent and the formation of the so-called "patronage resource". An analysis of the survival of autocracies in African countries has shown a link between oil rents and the time that political leaders have been in power¹⁶. The general logic of this approach is that an increase in oil revenues stabilizes dictatorships not by limiting the prospects for democratization, but by preventing the current regime from changing power.¹⁷

In order to concretize the categorical apparatus and operationalize the concepts of "resource rent economy", "Dutch disease", "paradox of abundance", "resource curse", "resource-dependent state", "behavior of rentier", as well as to highlight approaches to the problem of resource abundance, the research relies on the works of R. Auti, M. Ellman, G. Wright, J. Chelusta, G. Torvaldur, A.A. Maltsev, S. Kimelman, V.T. Ryazanov¹⁸.

⁶ Wright G., Chelusta J. Exorcizing the resource curse: minerals as a knowledge industry, past and present // Stanford University Working Papers. 2002. – URL: <https://ideas.repec.org/p/wop/stanec/02008.html> (дата обращения 01.11.2021)

⁷ Teorell J. Determinants of Democratization: Explaining Regime Change in the World, 1972–2006. Cambridge University Press. 2010. 220 p.

⁸ Gandhi J., Przeworski A., Authoritarian Institutions and the Survival of Autocrats // Comparative political studies. 2007. Vol. 40. №11. P. 1279-1301

⁹ Tsui K.K. More oil – less Democracy // The Economic Journal. 2011. Vol. 121. №551. P. 89-115.

¹⁰ Luong P.J., Weintal E. Oil is not a curse. Cambridge University Press. 2010. 425 p.

¹¹ Karl T.L. The paradox of plenty. University of California Press. 1997. 342 P

¹² Caselli F. Power Struggles and the Natural Resource Curse // LSE Research, London School of Economics. 2006. [Электронный ресурс]. – URL: <https://personal.lse.ac.uk/casellif/papers/curse.pdf> (дата обращения 01.11.2021).

¹³ Cuaresma J. C., Oberhofer H., Raschky P. Oil and the duration of dictatorships. // Public Choice. 2011. №148. P. 505-530.

¹⁴ Smith B. Oil wealth and regime survival in the developing World, 1960-1999 // American Journal of Political Science. 2004. Vol. 48. №2. P. 232-246.

¹⁵ Caselli F. Power Struggles and the Natural Resource Curse // LSE Research, London School of Economics. 2006. [Электронный ресурс]. – URL: <https://personal.lse.ac.uk/casellif/papers/curse.pdf> (дата обращения 01.11.2021).

¹⁶ Omgba L. D. On the Duration of Political Power in Africa: The Role of Oil Rents // Comparative Political Studies. 2009. Vol. 42. Issue: 3. P. 416-436

¹⁷ Wright J., Frantz E., Geddes B. Oil and Autocratic Regime Survival // British Journal of Political Science. 2015. №45(2). P. 287-306.

¹⁸ Gylfason T. Natural resources, education, and economic development // European Economic Review. 2001. №45. P. 847-859. Ellman M. Natural Gas, Restructuring and Re-Industrialization: The Dutch Experience of Economic Policy // London. Academic press. 1981. P. 27-29.

In order to analyze the problem area of the "stability of the political regime", concept we mainly use works that illuminate the problems of the duration of political regimes and the stay in power of a political leader: B. Magaloni¹⁹, M. Olson²⁰, T. Besley and M. Kudamatsu²¹, J. Gandhi and A. Przeworski²², J. Wright and A. Eskriba-Folch²³, J. Wallace²⁴, B. de Mesquita²⁵, A. Schmotz²⁶, A. Abulof²⁷.

In our study, the key role is played by the idea of a "roving and stationary bandit" by M. Olson and A. Przeworski. The idea of a stationary bandit is important insofar as it is assumed that an autocracy with large profits will use rents to implement declared policies, improve the welfare of citizens to maintain public support. The stationary bandit is interested in meeting the needs of society; however, this assumption does not guarantee the absence of incentives for "predatory behavior". In addition, we rely on the thesis that autocracies can be economically effective if there are institutions of the selectorate (B. de Mesquita) to discipline "weak" political leaders (T. Besley and M. Kudamatsu).

In order to analyze the concept of the state-capacity and the quality of governance, the following studies were used: B. Rothstein²⁸, B. Gilley²⁹, J. Robinson and R. Torvik³⁰, C. Tilly³¹, J. Moller and E. Skaning³², N. Charron and V. Lapuente³³. Our research is based on the work of C. Tilly, who attributes the state-capacity to an important characteristic of the regime, which is the ability of the state to implement political decisions. Tilly divides all states according to the

Auty, R. *Sustaining Development in Mineral Economies: The Resource Curse Thesis*. Routledge, London. 1993.

Рязанов В.Т. Экономика рентных отношений в современной России // Христианское чтение. 2011. №4 (39). С. 149-176.

¹⁹ Magaloni B. *Credible Power-Sharing and the Longevity of Authoritarian Rule* // SAGE Journals. 2008. Vol. 41. Issue: 4-5. P. 715-741

²⁰ Olson M. *Dictatorship, Democracy and Development* // Political Science Review. 1993. № 7(3). P. 567-576.

²¹ Besley T.J., Kudamatsu M. *Making Autocracy Work*. // Centre for Economic Policy Research. LSE STICERD Research Paper No. DEDPS48. 2007. [Электронный ресурс]. URL: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1127017 (дата обращения 01.11.2021).

²² Gandhi J., Przeworski A., *Authoritarian Institutions and the Survival of Autocrats* // Comparative political studies. 2007. Vol. 40. №11. P. 1279-1301

²³ Wright J. and Eskriba-Folch A. *Authoritarian Institutions and Regime Survival: Transitions to Democracy and Subsequent Autocracy* // British Journal of Political Science. 2012. Vol. 42. № 2. P. 283 - 309

²⁴ Wallace J. *Cities, Redistribution and Authoritarian Regime Survival* // The Journal of Politics. 2013. Vol. 75. №3. P. 632-645.

²⁵ Mesquita B.B., Smith A., Siverson R.M., Morrow J.D. *The Logic of Political Survival*, Cambridge, MA: MIT Press, 2003. 536 p.

²⁶ Schmotz A. *Vulnerability and compensation: constructing an index of co-optation in autocratic regimes*. // European Political Science. 2015. Vol. 14. Issue 4. P. 439-457.

²⁷ Abulof U. «Can't Buy Me Legitimacy»: The Elusive and Illusive Stability of Mideast Rentier Regimes // Journal of International Relations and Development. 2015. №20 (1). P. 55-79.

²⁸ Rothstein B. *Good governance* // In: The Oxford Handbook of Governance. Oxford University Press. 2012.

²⁹ Gilley B. *The Determinants of State Legitimacy: Results for 72 Countries* // Revue Internationale De Science Politique. 2006. Vol. 27, № 1. P. 47-71.

³⁰ Robinson J.A., Torvik R. *White Elephants*. // Journal of Public Economics. 2004. № 89. P. 197-210.

³¹ Tilly C. *Democracy*. Cambridge University Press. 2007. 234 p.

³² Moller Jorgen and Skaning Svend-Eric. *Stateness First?* // Democratization № 18 (1). 2011. p. 1-24.

³³ Charron Nicholas and Lapuente Victor. *Which Dictators Produce Quality of Government?* // Studies of Comparative International Development. 46(4). 2011. pp. 397-423

presence of two pairs of characteristics: "democratic / undemocratic" and "high capacity / low capacity". The work of J. Moller and S. Skaning adheres to a similar logic - the state-capacity is considered in terms of the ability to implement a political course, in addition, both democratic and non-democratic regimes can be endowed with a high level of capacity. In the work of N. Charron and V. Lapuente, the thesis that in a one-party authoritarian regime the higher (lower) the average income, the higher (lower) the quality of government, is important for our research, while in monarchies and military regimes, the longer (shorter) the government's time horizon, the higher (lower) the quality of government. Our study also uses the concept of "white elephants" by J. Robison and R. Torvik, according to which the ruler uses super-profits from natural resources not to improve the economy or the welfare of citizens, but to buy political loyalty, or co-optation.

A wide range of approaches and theses on the impact of resource dependence on economic development, as well as the features of the resource rent economy, is reflected in a number of studies in the field of economic theory:

1) *Resource wealth is not conducive to economic development*. Countries with a strong dependence on resource exports face poor economic and political development. These states spend resource capital faster than they create another form of capital, and thus become poorer regardless of income level. However, at the same time, politics and political institutions are intermediaries between resource dependence and political and economic outcomes. (studies by A. Oslund³⁴, J. Sachs, A. Warner³⁵; M. Humphreys, J. Stiglitz³⁶, D. North, J. Wallis, S. Webb, B. Weingast³⁷, A. Kudrin³⁸, V. Polterovich, V. Popov and A. Tonis³⁹);

2) *The economic effects of resource dependence are positive* (studies by E. Karpikov⁴⁰, K. Tsui⁴¹), however, economic growth due to the export of energy resources will not be able to bring social and cultural changes necessary for the successful establishment of a democratic government (research by M. Ross⁴²). Assuming the absence of political modernization, researcher K. Tsui

³⁴ Ослунд А. «Рентоориентированное поведение» в российской переходной экономике // Вопросы экономики. 1996. № 8. С. 99—108

³⁵ Sachs J., Warner A. Natural Resource Abundance and Economic Growth. // NBER Working paper series. 1997. Harvard University Press. 50 P.

³⁶ Karl T.L. Ensuring Fairness: The Case for a Transparent Fiscal Social Contract. // In: Humphreys M., Sachs J., Stiglitz J. (eds). Escaping the Resource Curse. Columbia University Press. 2007. 432 P.

³⁷ Норт Д., Уоллис Дж., Уэбб С., Вайнгаст Б. В тени насилия: уроки для обществ с ограниченным доступом к политической и экономической деятельности: доклад к XIII Апрельской международной научной конференции по проблемам развития экономики и общества, Москва. М.: Изд. дом Высшей школы экономики. 2012. 48 с.

³⁸ Кудрин А.Л. Стабилизационный фонд: зарубежный и российский опыт // Вопросы экономики. №2. 2006. С. 28-45

³⁹ Полтерович В., Попов В., Тонис А. Механизмы «ресурсного проклятия» и экономическая политика // Вопросы экономики. 2007. №6. С. 4-27

⁴⁰ Карпиков Е. Свежий взгляд на рентную проблему // Экономические науки. №6. 2004. 20 с.

⁴¹ Tsui Kevin K. More oil – less Democracy. // The Economic Journal. Vol. 121, №551. 2011. pp. 89-115

⁴² Ross M.L. Does Oil hinder Democracy? // World Politics. 2001. №53. P. 325-361

argues that even if oil impedes the development of democratic institutions, it is not necessarily a curse for the economy, since autocracies can be economically efficient if there are institutions of discipline by a selector of “weak” political leaders⁴³.

3) In the long term, there *is no causal relationship* regarding the negative impact of exports and large volumes of energy production on economic growth (M. Alekseev et al.⁴⁴, G. Tallok⁴⁵).

An analysis of the literature on the stability of resource rent autocracies has shown that, on the one hand, resource-dependent autocracies are indeed, on average, more stable than autocracies without the ability to extract resource rent. However, on the other hand, there are challenges and opportunities for further research, which are associated with:

- dividing researchers into those who relate the resource curse exclusively to oil production, and those who use data on other types of rent-forming resources in their studies;

- the spread in approaches to operationalize and measurement resource dependence. For example, some studies impose severe restrictions on the sample, arguing that resource dependence can be considered when the share of hydrocarbon exports exceeds 50% of total exports. This condition automatically narrows the general population of countries with a resource rent economy, but with different political systems - accordingly, the results of the analysis will be relevant for these countries. In addition, the export share indicator does not show what share in GDP is made by revenues from natural resources.

It is important to note that in many studies authoritarian regimes *are considered "in general"*, the political context is often not considered - *the type of authoritarian regime*. As a result, the analysis of resource rent states is carried out in a "vacuum", a strong assumption is introduced that all resource rent economies differ from each other only in quantitative indicators of resource dependence. *We believe that it is important to consider the type of authoritarian political regime when analyzing the problem of the “resource dependence” and building appropriate models*. In addition, it is also necessary to take into account the peculiarities of the regulation of the extracted rent, the commodities of resource prices in a particular period and the policy pursued in this regard.

⁴³ Besley T.J., Kudamatsu M. Making Autocracy Work. // Centre for Economic Policy Research. LSE STICERD Research Paper No. DEDPS48. 2007. [Электронный ресурс]. - URL: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1127017 (дата обращения 01.11.2021)..

⁴⁴ Alexeev M., Conrad R. The elusive curse of oil. // The review of Economics and Statistics. 2009. Vol. 91. №3. P. 586-598

⁴⁵ Таллок Г. Общественные блага, перераспределение и поиск ренты. – М: Изд-во Института Гайдара. 2011.

The aim of the study is to identify the additional factors moderating the influence of the resource rent economy on the stability of an authoritarian regime as long-term tenure of authoritarian political leaders.

This goal sets the following **objectives**:

- 1) to operationalize the concept of “resource rent economy”, compare it with such concepts as “Dutch disease”, “paradox of abundance”, “resource curse”, “resource-dependent state”, analyze the quantitative measurement of resource dependence;
- 2) Analyze the concepts of sustainability of authoritarian regimes: the theory of a "stationary bandit", co-optation as a way autocrat`s survival, the role of the selectorate, a winning coalition, institutions and elections
- 3) to analyze the approaches to understanding government effectiveness and quality of government.
- 4) to conduct a case study based on a sample of resource rent economies based on the selected criteria. Highlight the estimated explanatory variables for the future model;
- 5) to form a survival models for autocrats using Cox regression to predict the risk of instability of authoritarian regimes in connection with certain explanatory variables.

Methodology, theoretical framework u methods

This study follows the logic of one type of neoinstitutionalism - *rational choice institutionalism*. This methodological basis is heterogeneous, our research is based on the approach to the *endogenous interpretation of institutions* by R. Calvert and A. Schotter⁴⁶, who believed that institutionalization is a consequence of a certain ratio (equilibrium) of resources and opportunities that actors have, and the rules of the game (institutions) arise in the process of interaction of actors.

The theoretical framework of the study is based on the junction of the ideas of the supporters of the problem of resource distribution⁴⁷, the concepts of a "stationary bandit" by M. Olson⁴⁸, S. Huntington's principles in relation to rental states - "No taxation - no representation"

⁴⁶ The Oxford Handbook of Political Institutions // Oxford. 2006. P. 24.

Calvert R. Rational Actors, Equilibrium, and Social Institutions // In. Knight J., Sened I. (Eds.) Explaining Social Institutions. Ann Arbor: University of Michigan Press. 1995. P. 57-95.

Schotter A. The Economic Theory of Social Institutions. New York: Cambridge University Press. 1981. 177 p.

⁴⁷ This approach is presented in some studies (Ross, 1999, 2001, 2008; Treisman, 2010; Youngs, 2008; Roll, 2012): what matters is not how much money a country receives from the export of energy resources, but how these revenues are used. The book "Oil is not a curse" (Luong, Weinthal, 2010) poses a counter question: what obligations does the government have to be able to derive benefits? As a result, the authors put forward two theses: firstly, states rich in resources receive a "curse" not because of the plenty, but because of the chosen model of managing their resource wealth. Second, weak institutions are not inevitable in resource states.

⁴⁸ The idea of a stationary bandit is important insofar as it is assumed that an autocracy with super profits to maintain public support will use the rent to implement declared policies, improve the welfare of citizens. The stationary bandit

or "No representation without taxation", state-capacity (C. Tilly, J. Moller, S. Skaning), expressed in the ability of the state to carry out political decisions or declared course in life. The cornerstone of this theoretical framework is the ability of resource-dependent states to maximize their rent (rentier-state).

In our research we use the case-study method for the purpose of in-depth study and comparative analysis of cases, as well as in order to determine the possible explanatory variables for a statistical model, and design additional boundaries of the model. The heterogeneity of the sample is explained by the choice of the strategy, which is based *on the analysis of maximum variation of cases* in order to obtain corrected information about the significance of the conditions difference.

The study carries out a *survival analysis* using a *proportional hazards model* to predict the risk of the event being analyzed, as well as estimate the time to the event based on the values of the explanatory variables used. Survival analysis is based *on the Cox regression method*, which estimates the relationship between survival time and explanatory variables. Within each observation, at any point in time, a certain state of survival is recorded.

Selection of empirical data

In the study, two samples are used, depending on the research method.

For the case study, a sample from 5 countries was used: Russia, Venezuela, Saudi Arabia, Angola, Nigeria. The sample countries have different indicators of the quality of government by the World Bank Government Effectiveness (WGI), as well as different degrees of “rental dependence” of the economy, according to the data on the natural resource rent in GDP. The heterogeneity of the sample is also reflected in the types of authoritarian regimes in these countries, according to B. Geddes typology⁴⁹. The period 1960–2018 years is taken as the time interval, while the analysis of the cases focuses on the periods of sharp fall and rise in oil prices.

The cases were analyzed in accordance with the following indicators: characteristics of the rent-based economy, characteristics of the mechanisms for regulating the distribution of income from the oil and gas sector, the quality of government and resource management, distribution of taxation on income and on foreign trade, the reasons for the loss of power by an autocrat.

is interested in meeting the needs of society; however, this assumption does not guarantee the absence of incentives to "predatory behavior".

⁴⁹ Geddes B., Wright J., Frantz E. Autocratic Breakdown and Regime Transitions: A New Data Set. // Perspectives on Politics. 2014. Vol. 12(2). P. 313-331.

For the analysis of survival using Cox regression, we use a sample of 68 autocrats from 27 countries. In total, there are 861 observations in the data set, of which 61 are uncensored, that is, they record the occurrence of an event (the loss of power).

The sample was based on the following principles:

- a) according to B. Geddes' typology⁵⁰, the regime is one of the types of authoritarian regime, and according to Freedom in the World it is not recognized as an electoral democracy⁵¹;
- b) the level of the share of natural resource rent from GDP does not have a cut-off threshold; both autocracies with and without resources are considered.

It should be noted that all the obtained results of the models are valid for authoritarian regimes. However, due to the fact that the analysis of democratic regimes in the conditions of rent-based economies goes beyond the scope of our research, it should be designated as a limitation of our model. The results of the models do not guarantee that the identified effects do not work in a similar way in democracies.

We use the ARCHIGOS database to compile our dataset on the duration of political leaders. The model also introduced indicators of the quality of government: State Capacity HSI (Hanson, Sigman)⁵² as the main indicator, International Country Risk Guide and Government Effectiveness (WGI) as auxiliary indicators.

Contribution to the discussion of the problem in existing literature

The study proposes the use of World Bank data on the natural resource rents (% of GDP) as a key indicator of the state's resource dependence, as well as Cox regression as a method that reflects more than a causal relationship, so much predicting the risk of the event being analyzed and evaluating the influence of independent variables at this risk.

The study also shows that the survival of an authoritarian regime in a resource rent economy cannot be analyzed without the political context. Using an actor typology, the study examines the quality of government as an additional factor within the influence of a resource-based rental economy on the stability of an authoritarian regime, taking into account the political context represented by the type of political regime as an independent variable.

⁵⁰ Ibidem.

⁵¹ Freedom House. Freedom in The World. [Электронный ресурс]. - URL: <https://freedomhouse.org/report/freedom-world> (дата обращения 01.07.2021)

⁵² Hanson J., Sigman R. Leviathan's Latent Dimensions: Measuring State Capacity for Comparative Political Research. // Journal of Politics. 2020. [Электронный ресурс]. - URL: https://www.researchgate.net/publication/254067440_Leviathan%27s_Latent_Dimensions_Measuring_State_Capacity_for_Comparative_Political_Research (дата обращения 01.09.2021).

In terms of policy, it also indicates that one of the foundations of quality resource management is the Enabling environment (according to the WGI), which is the rule of law, the quality of government, control of corruption and open data.

The results of the study can be used to further exploration the possibilities and limitations of the proportional hazards model in social sciences, as well as to adjust previous studies based on the proposed sampling approach.

Statements to be defended

1) The overlapping concepts of “Dutch disease”, “paradox of abundance” and “resource curse”, separately and together, are special cases of the resource-based economy, which in turn is a component of a resource-wealthy state.

2) The share of resource rent in GDP (%) appears to be a key indicator reflecting the degree of economy dependence on natural resources;

3) In order to stay in power for a long time, autocrats should strive to co-opt the population by providing public goods and cannot rely on repression all the time. Quality of government is essential for resource rent economies to convert rents into public goods.

4) High prices for a rent-forming resource do not always contribute to the autocrat's choice of a political course for the provision of public goods.

5) The share of resource rent in GDP correlates with the longer term of the autocrat. The risk of an autocrat losing power is twice as high in economies where the share of natural resource rent in GDP is less than 15%.

6) The high quality of government, expressed by an indicator of the State Capacity, covering extractive, coercive and administrative capacities, correlates with a long survival time of an authoritarian regime;

7) There is a link between the type of authoritarian regime and the survival of an autocrat in a resource-based rental economy: the survival time of autocrats is longer in monarchies, personalist and one-party authoritarian regimes than in a military regime.

Research approbation

1) Shulika Y.E. Governance effectiveness: finding the objective conceptualization and evaluation / Kamolikova V.R., Shulika Y.E. // RUDN Journal of Political Science. 2018. Vol. 20. No 2. P. 255-268.

2) Shulika Y.E. Survival analysis for authoritarian regimes in resource rent economies: possibilities and limitations of the proportional hazards model // Bulletin of Perm University. Political Science. 2018. Vol. 12. No 4. P. 122-139

3) Shulika Y.E. Political Security in Authoritarian Systems With a Resource Rent Economy: a Result of the "Social Contract" and High Resource Prices? / Akhremenko A.S., Shulika Y.E. // Przegląd Strategiczny. 2019. No. 12. P. 299-318

Participation in scientific events:

1) III International Scientific and Practical Conference for Students and Postgraduates "Welt und Wissenschaft", April 19, 2017, Moscow, NRU HSE. Report "Rohstoffwirtschaft und Stabilität autoritärer Regime (rent-based economy and sustainability of an authoritarian regime)".

2) Summer School Gray "Zones of Politics", August 24-31, 2017, Moscow, National Research University Higher School of Economics. Participation in the work with the article "The effectiveness of public administration: in search of objective conceptualization and measurement".

3) Summer School "New Challenges for Political Research", 02-08 September 2018, Moscow, National Research University Higher School of Economics. Contribution to the article "Analysis of the survival of authoritarian regimes in rent resource economies: the possibilities and limitations of the proportional hazard model".

4) Round table of staff, graduate students and students of the Peoples' Friendship University of Russia "In the regime of sanctions: problems and prospects of economic and political development of Russia", February 20, 2016, Moscow, PFUR. Report "The Russian Oil and Gas Sector under the regime of sanctions: Analysis of Opportunities and Development Problems."

Analysis of data and findings

The study provides the analysis of the categorical apparatus and operationalization. The basis was made with such concepts as “resource rent economy”, “Dutch disease”, “resource curse”, “paradox of abundance”, “rentier state”. During analysis, it was revealed that the intersecting concepts of "Dutch disease" and "resource curse" are special cases of a resource rent economy, which in turn is a component of a resource-rich state. In addition, the main operationalization indicators of the resource rent economy were identified: the share natural resource rent in GDP (in%), the share of the type of economic activity in the structure of GDP (in %), the share of fuel and energy products in the total volume of exports (in %), the share of revenues in the state budget, the dependence of the exchange rate on fluctuations in the oil price (correlation). The indicator of the share of natural resource rent in GDP was chosen as relevant for the further research.

As a result of the theoretical and conceptual framework analysis of the authoritarian regime stability and the quality of government, the theoretical framework of our hypothesis (the quality of government can be an additional factor within the influence of the resource rent economy on the stability of the authoritarian regime) was formed. It was based on the concepts of “stationary bandit”, the implementation of a social contract and the distribution of public goods and resources, the state-capacity as the ability to pursue a policy. The cornerstone of the theoretical framework is represented by the ability of resource-dependent states to maximize rent (rentier-state).

In addition, within the theoretical framework we set following assumptions: Firstly, authoritarian rulers cannot rely on violence all the time. Repression is a short-term measure, and more stable ruling requires the distribution of resources, including the provision of public goods. The goal of the "median" autocrat is rather to stay in power for as long as possible and maximize rent, than to follow only "predatory behavior". Secondly, to ensure better survival, it is necessary to co-opt not only representatives of the political elite, providing private goods, but also the population: to ensure socio-economic development, public goods - to strive for the formal maintenance of the "social contract". Third, the mere possibility of extracting rent is not enough to ensure co-optation. In order to assess how efficiently revenues from natural resources are distributed, it is necessary to understand the level of quality of government as a favorable condition. That is why, the quality of government is necessary for resource rent economies to convert resources into public goods.

As a result, the hypothesis was supplemented as follows: high rates of natural rent contribute to a more stable regime, if the quality of government also has relatively high rates. The quality of government in this case is presented not as a mediator, but as a conditionally moderating

factor that enhances the influence of the rent-based economy on the stability of an authoritarian regime.

In order to identify the features of the political regime in resource-rent economies and to highlight the variables for the proportional hazard model, a case study was carried out. A sample of 5 countries was used: Russia, Venezuela, Saudi Arabia, Angola, Nigeria. As part of the analysis, attention is focused on the periods of sharp fall and rise in oil prices. Within the case-study, the features of the functioning of stabilization and reserve funds in the studied states were highlighted, in particular, the principles of accountability and transparency, as well as the efficiency of spending the super profits. In Venezuela, Nigeria and partly in Saudi Arabia, there is a misuse of sovereign wealth funds or stabilization funds for unprofitable, notoriously unsuccessful infrastructure projects to increase political loyalty and co-optation. In Nigeria, Angola and Russia, the procedure for using funds on the deposits is very simplified, not transparent, and vulnerable to misuse. Some authoritarian regimes exhibit the rentier effect of imposing a low tax rate to mitigate democratic pressures and demands for representation.

The analyzed cases also reveal the problem of the influence of price commodities: for example, Venezuela, Saudi Arabia, Nigeria, Russia show that high oil prices contribute to the autocrat's following a long planning horizon - it is in these conditions that high indicators of the quality of government, expressed in the ability to implement the declared policy, as well as effectively distribute rental income. Otherwise, low prices often contribute to a short planning horizon, in such conditions the state capacity and the quality of government fall, corruption increases, and cases of misuse of reserve funds become more frequent. However, it has also been shown that there is no strong link between policy stance and resource price fluctuations.

Based on the case-study, it was concluded that the resource dependence of the economy negatively affects the stability of the regime not so much in the absence of economic growth (the "Dutch disease" itself is curable), but due to the struggle of political elites for the redistribution of resources in conditions of guaranteed incomes, lack of accountability mechanisms, transparency and weak representation system.

The proportional hazards model based on the Cox regression to analyze the survival rate for autocrats showed that:

- firstly, the share of resource rent in GDP correlates with the longer term of the autocrat. The risk of an autocrat losing power is twice as high in economies where the share of natural resource rent in WFP is less than 15% (Appendix 1). At the same time, there are variations in the survival rate of the authoritarian regime under different configurations of the initial data - considering the rent, autocrats "more slowly" lose power.

- secondly, an assessment of the impact of the quality of government on the risk of loss of power by an autocrat allows rejecting the null hypothesis that there is no relationship between the State Capacity Indicator (HSI) and the survival of the regime. In other words, even considering the correlation between resource rent and regime survival, the relationship between State Capacity HSI and sustainability turned out to be significant. The risk of an autocrat to lose power is reduced by 67.3% with an increase in the indicator of the quality of government by one unit. The risk of an autocrat to lose power is 76.8% higher if the State Capacity HSI (Hanson, Sigman) is less than -0.127 (minimum value -3, maximum value 3) (Appendix 2).
- thirdly, according to Cox regression analysis, cumulative survival persists longer over time in monarchies, personalist and single-party regimes. In a monarchy, the risk of losing power is 79.3% lower than in a military regime, and political leaders in personalist and one-party regimes are only 11.5% and 13.6% more likely to leave their posts, respectively, than in a military regime (Appendix 3).
- fourthly, the share of natural rent in GDP above 15% correlates with a higher survival rate of the regime, if the State Capacity HSI also has high values (greater than or equal to -0.127). In conditions of the share of natural resource rent in GDP more than 15%, the probability of survival of the State Capacity HSI more than -0.127 is 4% higher than the probability with the State Capacity HSI less than -0.127 (Appendix 4).

Thus, high indicators of the quality of government correlate with a significantly lower level of risk for any level of “rent”, while high indicators of natural resource rent in GDP “compensate” for survival with low indicators of the quality of government.

Despite the fact that a detailed analysis of the effect of repression goes beyond the scope of the research, it is worth noting that the Political Terror Scale (PTS) indicator, which assesses the perception of the repressions, correlates with greater risks to lose power. The results of the model showed that the higher the value of the PTS, the higher the risk of losing power (it increases by 32.5% with an increase in the indicator by one).

It should be noted the following limitations of the research, which can be considered as opportunities for further study of the problem.

Firstly, the limitations of the empirical base, which lie both in the direct choice of certain variables (considering their methodology and time boundaries), and the obtained results of models and case studies, which are valid for authoritarian regimes, but have not been tested on a sample of democratic regimes.

Secondly, the limitations of both the empirical and theoretical framework, which consist in considering the quality of government outside the resulting indicators (outcomes) of the provision of public goods (mortality rate, spending on health and education, the number of graduates from educational institutions, the number of hospitals, etc.). As a promising and fruitful direction for future research, such an emphasis would require a very significant change in research design.

In general, as a result of the analysis of scientific literature, case studies, as well as analysis of survival using Cox regression, we presented arguments which support the hypothesis that the quality of government is an additional factor in the influence of resource dependence on the survival of autocracy.

$$h_i(t) = h_0(t) \exp \left(\begin{aligned} & \beta_1 \text{Resource Rents group}_i \text{ (or State Capacity HSI (coded))} + \\ & + \beta_2 \text{State Capacity HSI}_i \text{ (or \% Resource Rents)} + \beta_3 \log \text{Age}_i + \\ & + \beta_4 \log \text{GDP}_i + \beta_5 \log \text{Population}_i + \\ & + \beta_6 \text{Ethnic Fractionalization}_i \end{aligned} \right)$$

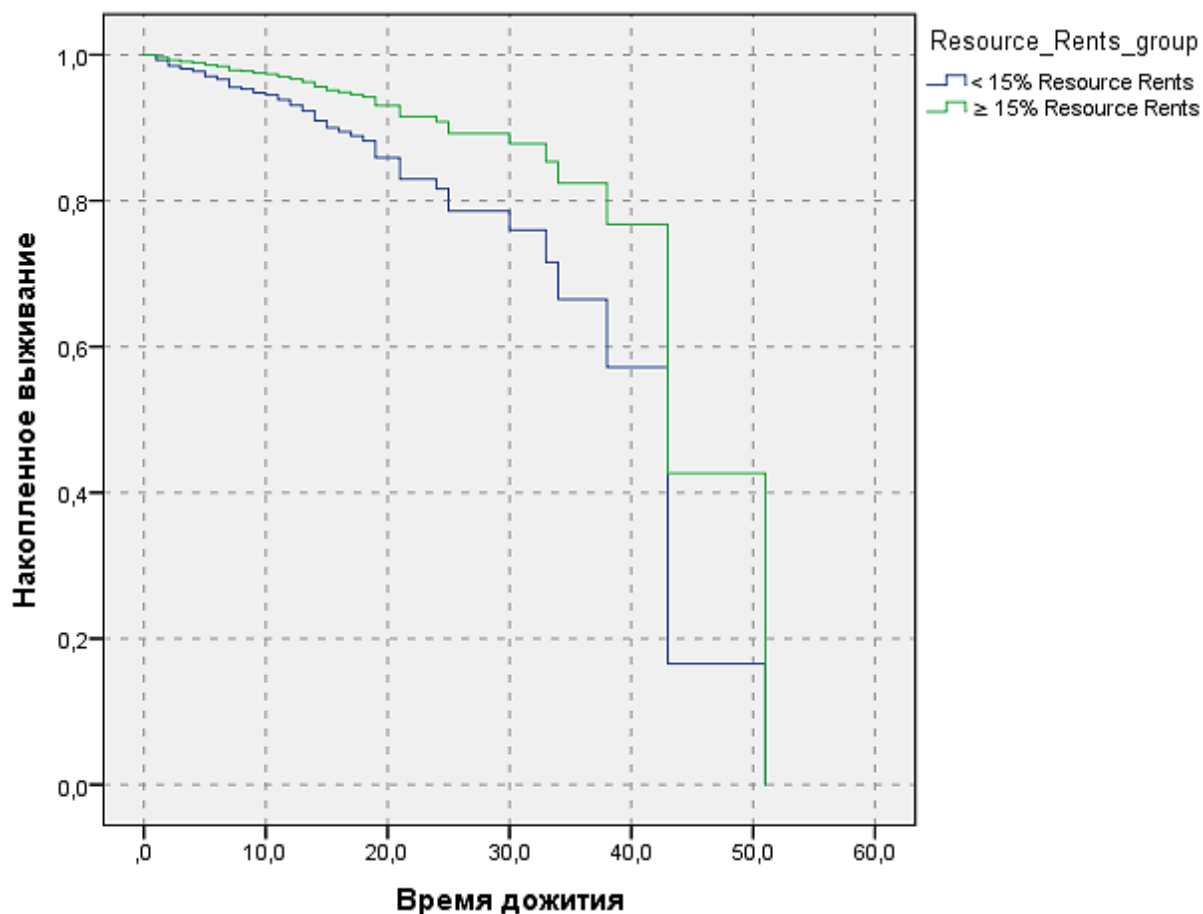


Figure 1 - Survival function, horizontally - survival time (till loss of power) in years, vertically - accumulated survival rate

Lines: blue – the natural resources rents in GDP <15%, green - the natural resources rents in GDP ≥15%

Appendix 2

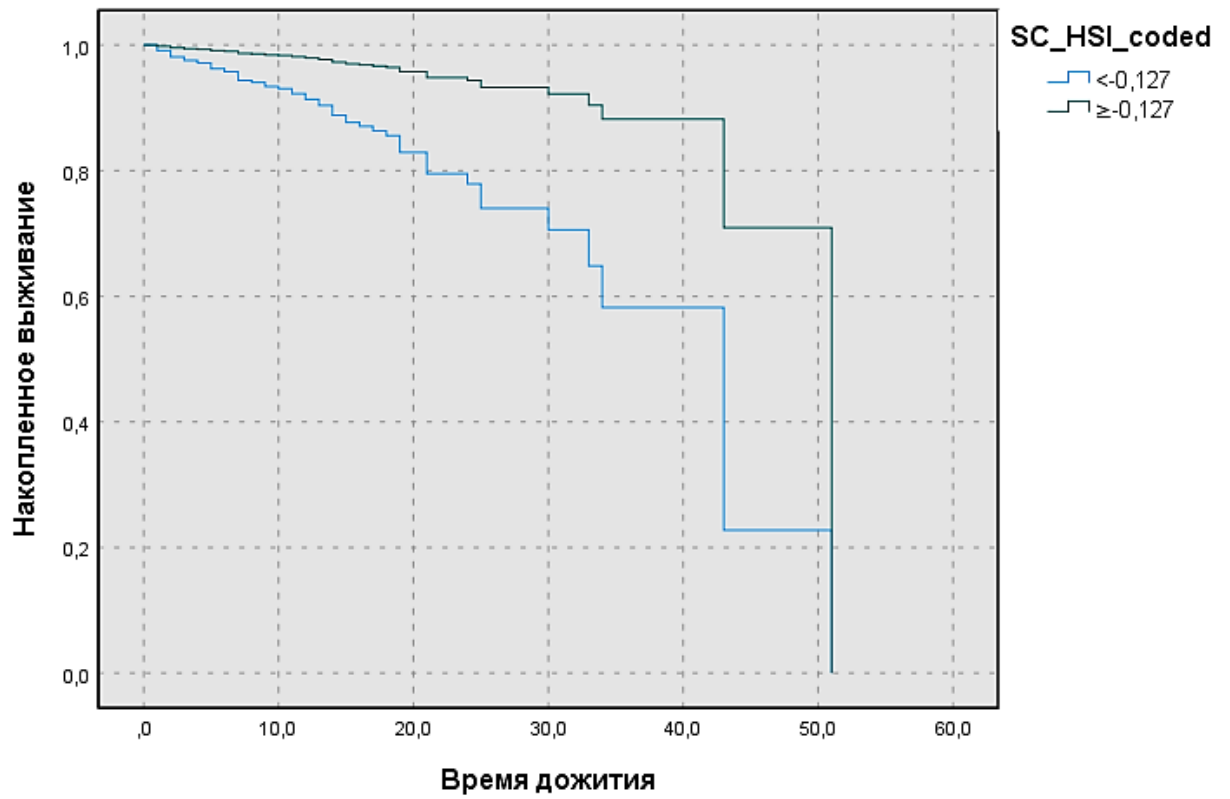


Figure 2 - Survival function, horizontally - survival time (till loss of power) in years, vertically - accumulated survival rate. Lines: blue - State Capacity HSI <-0.127, green - State Capacity HSI \geq -0.127%

$$h_i(t) = h_0(t) \exp \left(\begin{aligned} &\beta_1 \% \text{ Resource Rents}_{i_1} + \beta_2 \text{ State Capacity HSI}_{i_2} + \\ &+ \beta_3 \log \text{ Age}_{i_3} + \beta_4 \log \text{ GDP}_{i_4} + \beta_5 \log \text{ Population}_{i_5} + \\ &+ \beta_6 \text{ Ethnic Fractionalization}_{i_6} + \beta_7 \text{ Regime Type}_{i_7} \end{aligned} \right)$$

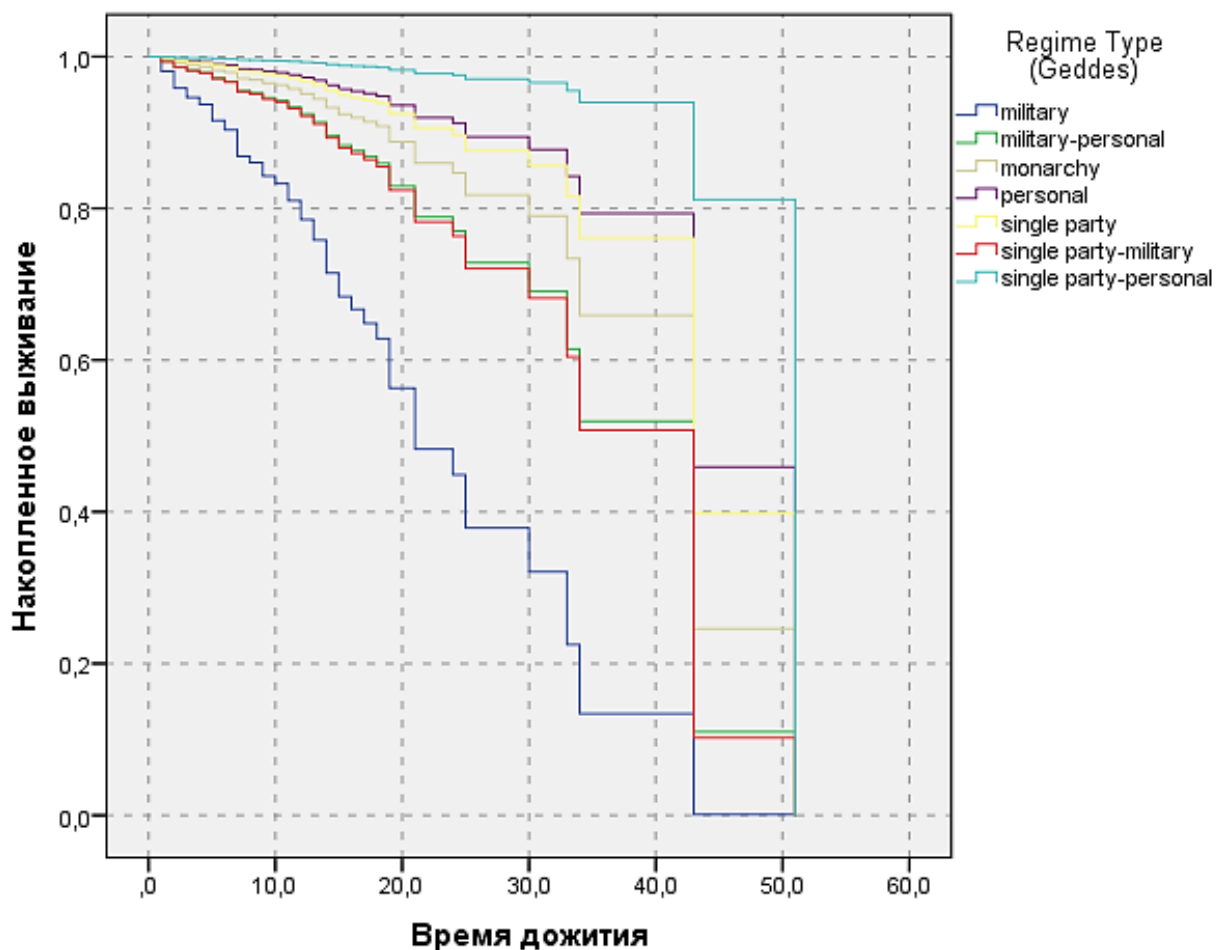


Figure 3 - Survival function, horizontally - the survival time (till loss of power) in years, vertically - accumulated survival rate, expressed in the probability of the absence of an event (loss of power does not occur). Lines: blue – military regime, green – military-personalist regime, brown – monarchies, purple – personalist regime, yellow – single party regime, red – party-military regime, light blue – party-personalist regime

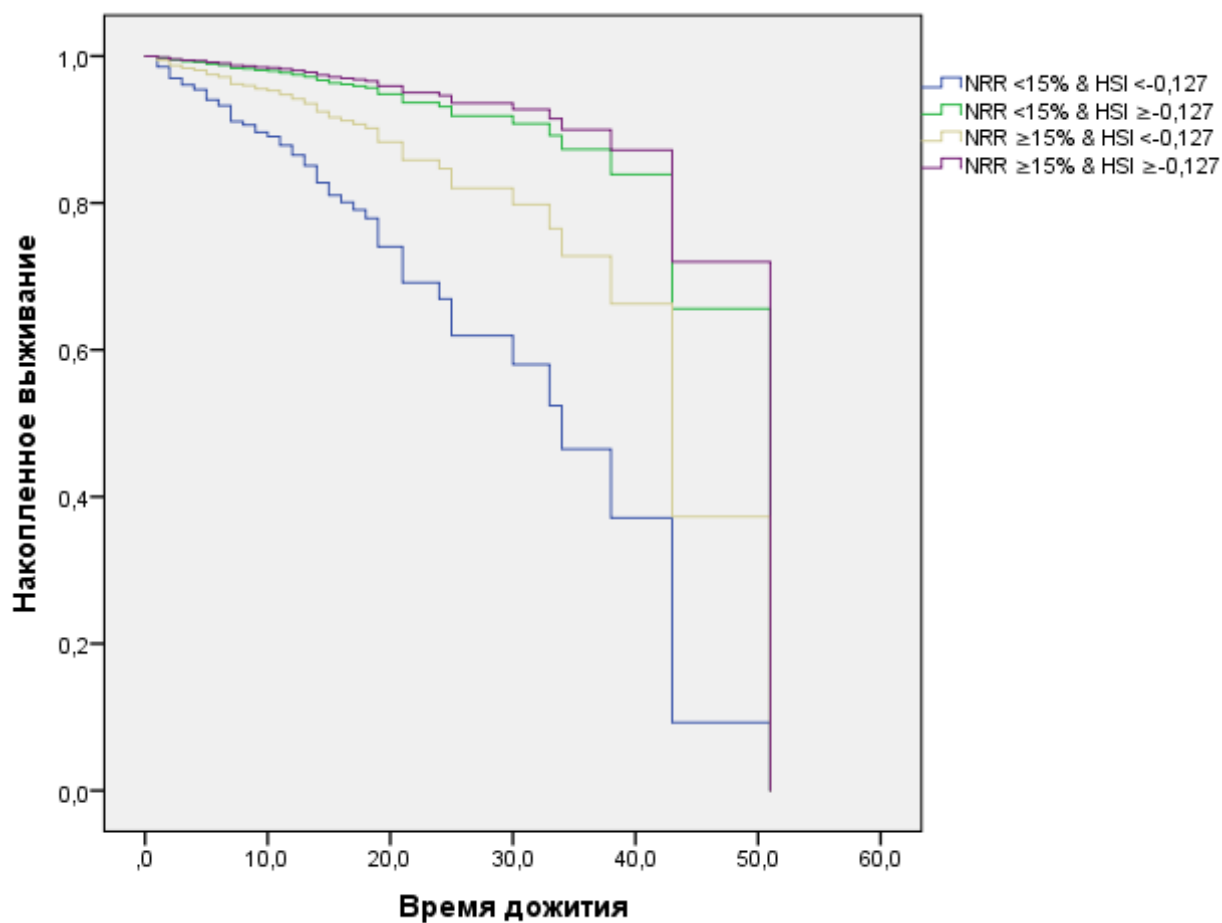


Figure 4 – Survival function with paired characteristics of the share of natural resource rent in GDP and State Capacity HSI