

Spatial Factor in Economic Security Management

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Abstract—The article is devoted to ensuring the economic security of the constituent entity of the Russian Federation. The problem of economic security arises during a period of deep economic upheavals leading to the threat of loss of state sovereignty - the Great Depression in the United States [14], the civil war in Russia [19], Germany after the First World War [8]. As practice has shown, the way out of such a situation should be as extraordinary and breakthrough as the situation itself - Roosevelt's course [10], New Economic Policy [20], fascism [5]. The current state of the Russian economy is rather complex and unpredictable. There are many reasons for this, external and internal. We believe that one of them is the spatial location of the subjects of the Federation. 51 constituent entities have turned into a border region, the security of which is associated with specific management, taking into account the peculiarities of climatic, socio-cultural, geographical, religious conditions, as well as the presence of a state border. An important feature of the management of the border region is the consideration of the spatial factor in the form of the implementation of the concept "border - rear", which provides for the presence of a "rear region" in each "border region". Both of them form their own security system, which is the basis of state security.

Keywords—*space, region, security, management, border, rear, location, center, periphery, country.*

I. INTRODUCTION

Economic security is a systemic, integrated concept, since, on the one hand, it acts as a subsystem of a more capacious system of "security" (country, continent, world, etc.), including military, political, information and other security, on the other hand, as an independent system, consisting of subsystems: the economic security of an individual, an economic entity, a region, etc. The essence of the concept of "economic security" is characterized not only by its definition, but also by its determining factors, therefore, various factors are increasingly revealed in the scientific literature. Most often, scientists identify the following factors of economic security against internal and external shocks: resource diversity, labor surplus, stability, ingenuity, adaptability, flexibility, cooperation, interdependence and support, autonomy, networking and innovation.

That is, based on the role and place of economic security and ensuring security of a higher order, as well as the impact

on the standard of living of the population, it can act as an independent object of research.

II. METHODOLOGY

In the course of the research, the dialectical approach, methods of system analysis, expert assessments, statistical groupings, forecasting, modeling, methods of scientific hypotheses and consistent judgments, grouping and classification, the principle of identifying the main link, the comparison method, etc. were used.

III. RESULTS AND DISCUSSION

The problems of the vulnerability of socio-economic systems and their ability to recover from the crisis, economic shocks are currently receiving significant attention from scientists, politicians and strategists.

It is worth noting that the economic security of the region is a recursive process, since the shock and the recovery process itself can lead to changes in the economic structure and functions of the region or entail changes, which, in turn, can affect the region's resistance and resilience to subsequent shocks. ... In other words, the security of the socio-economic system of the region is formed and determined by the reaction of the regional economy to shocks, therefore, security affects both the development of the regional economy and the evolution itself.

Consequently, the impact of economic shocks on the security of the system can be bi-directional: either negative (can damage the economy), or positive (economic shocks can provide new opportunities for the development of the socio-economic system). Economic shocks can directly or indirectly affect both the subjects of the socio-economic system and the entire economy in the pre-, over- and post-shock periods (i.e., until the pre-shock state is reached).

Thus, depending on the causes and duration of the economic shock, as well as the depth of the damage, the availability of resources and the possibility of their use, the reaction of the socio-economic system to the economic shock can be twofold. In one case, when the economy is able to withstand an economic shock and adapt to a new situation, the damage is not so serious and does not have any significant

impact on the development of the economy (economically secure system). In another case, when the economy is facing a big shock, two scenarios are possible:

1) an economic system capable of using its resources and capabilities; recovering purposefully and effectively after an economic shock or choosing a new way of managing, developing, i.e. renewal or reorientation (stable system).

2) an economic system that is unable to withstand an economic shock suffers heavy losses, and the development of its economy is disrupted (inelastic system).

At the next stage, we will determine the key issues of the economic security of the region, as well as the most promising focus of the analysis of this issue.

One of the features of economic security is increased attention to it in times of economic turmoil. This is confirmed by the time when the term "economic security" began to be used. From the literature [22] it follows that it first appeared in the United States in 1934. It is natural to assume that its occurrence is associated with the Great Economic Depression. When a country and its economy is in critical condition, in the stage of collapse, an intensive search for a way out of the current situation begins. This was the case in Russia in the 20s of the last century, it was so in Germany after the First World War, and so it was in the United States in the 30s. The way out, as a rule, was: NEP in Russia, Nazism in Germany, Roosevelt's course in the United States.

In modern Russia, where the search for ways of breakthrough development of the national economy has been going on for more than a decade, a near-depression state is taking shape. It is no coincidence that the concept of "economic security" was officially used in the State Strategy for Economic Security of the Russian Federation, approved by the Decree of the President of the Russian Federation of April 29, 1996, No. 608, and in the Strategy of Economic Security of the Russian Federation for the period up to 2030: Presidential Decree of May 13, 2017 No. 208. The adoption of these documents indicates that, firstly, the state of the Russian economy raises the most serious concerns among the country's leadership and, secondly, the lack of adequate protection measures against internal and external challenges that can lead the country and its economy out of the crisis state to the desired level of development. Therefore, the use of the "brainstorming method" for solving the problem of Russia's economic security, allowing the most unexpected options for getting out of the current situation, seems to be very relevant and acceptable.

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The problem of ensuring economic security is relevant both for domestic economic practice and for foreign ones, which is expressed in the number of publications presented in the public domain. Among domestic researchers, the works of A.A. Arbatova [2], L.I. Abalkin [1], V.A. Bogomolov [6], Krivorotova V.V. [15], V.L. Tambovtseva [26], K.L. Astapov [3] and others, among foreign researchers studying various aspects of economic security, the works of B. Buzan, J. Wilde, O. Veyver [7], D. Losman [18], Sh. Ronis [21], YES. Baldwin [4] and others.

In the works of these scientists, the concept of "economic security" is used: firstly, as the state's desire to ensure basic economic security for its citizens, protecting them from market risks, unemployment, accidents, etc.; secondly, these are economic mechanisms for maintaining territorial integrity, meeting the needs of citizens for goods and services, maintaining political and cultural independence and achieving freedom from the threat of a foreign military attack. Thus, security is understood comprehensively, encompassing theories and practices at various levels of society, from the individual to the entire human race.

The difficulty in solving this problem lies in its internal contradiction, since ignoring or weak "stability" of the economic security of the regions ultimately leads to an increase in tension in society; as well as excessive interference that violates the principles of economic freedom and independence of the regions and negatively affects the motivation for accelerated economic growth (mainly in the leading regions). The aforementioned actualizes the problem of analyzing the role of the spatial factor in ensuring the economic security of regions, improving the model of political governance of central authorities and territories, and finding ways to effectively "align" economic security in the regions.

Carrying out such a study will contribute to the development of theoretical concepts necessary to identify new tools for ensuring economic security, both at the regional and national levels, to identify features to ensure the "security" of the region, depending on its location.

The purpose of this study is to scientifically substantiate the feasibility and possibility of ensuring the country's economic security and the possibility of managing it, based on the unity of methodological, legal, instrumental, informational and organizational aspects, taking into account the spatial factor.

In connection with such a high uncertainty of economic conditions, the need to increase the mobility of the management process is aggravated, in particular, the aspect of the efficiency of spending budget funds, as well as optimization of the territory management system. In this regard, the theoretical and methodological possibilities and limitations of the implementation of economic security at the regional and national levels require clarification.

The concept and objectives of the study are based on an approach to economic security as a complex multifunctional and multi-level system, including a set of interrelated elements functioning in a certain space. For this, it is necessary, on the basis of the analysis of these components, to determine the current state of the system and its potential, to justify recommendations for ensuring economic security on the basis of agreeing on goals and identifying priority areas in the process of its implementation, by developing and implementing appropriate joint development programs.

The role of security can hardly be overestimated when characterizing the development of the national economy, since, as we see it, it is security that determines the minimum level of the state of the economy at this historical stage, below which one cannot go.

The modern economy is a system that is constantly subject to various shocks, such as recession, technological breakthroughs, political changes, etc. These shocks have a

destabilizing effect on the process and structure of economic security. These shocks have the greatest impact on the regional (city, regional, etc.) socio-economic systems. Only in rare cases, national or global shocks are spatially neutral and proceed without consequences. Along with global or national changes, there are also shocks arising at the local level and due to local characteristics, for example, liquidation or relocation of the main employer, local closure of the industry, etc. Therefore, it is logical to assume that the concept of "economic security" is of great importance in the study the reactions of territorial entities (regions) to various shocks, as well as in the study of the recovery process after these shocks, and, as a consequence, to understand the role that such shocks can play in the field of spatial dynamics of socio-economic security.

In addition, economic security, along with military, environmental, political, informational, cultural and other types of security, is only a part, albeit the most important, of national security. At the same time, each of the "security" sets a "red line", which is extremely undesirable to go beyond, since there is a danger of losing the sovereignty of the entire state. In achieving security, the first human instinct is manifested - self-preservation.

Economic security is a function of many variables. In this article, we will focus mainly on its spatial factor. The choice is justified by the influence of space on the general state of the economy, as well as other spheres of human activity. This is quite evident in the example of our country. So, until 1990, the USSR occupied an area of 22 402.2 thousand km² [25]. The area of modern Russia is 17,075.4 thousand km², that is, the territory occupied by the country has decreased by 31%. The population has also almost halved. But the reduction in area was followed by other quantitative and qualitative changes. The country with the second largest economy in the world, in 1999 in terms of GDP, was dropped to tenth place. The world has become unipolar. Russia, as the successor of the USSR, has slipped to the level of a regional power.

Based on the above study, it can be concluded that the economic security system can be represented as a developing system, which is characterized by the presence of both systemic and non-systemic shocks that form a complex of feedbacks that seek to neutralize the pressure of external or internal shocks (shocks) capable of changing the state of the system with an unknown result. To determine the optimal boundaries of the system's functioning, they tend to use a system of reverse communications, which are formed as a reaction of the system to a control action or external influence. The prerequisites for ensuring economic security is the level of innovative perception of the internal and external environment, which serves not only as a source, but also as the purpose of the system's existence.

However, back to "space". First of all, space is the basic category of the human concept of the world, reflecting its heterogeneous and multiple nature, that is, it is a scientific philosophical category. At the same time, space is an applied category, an indispensable condition for any economic activity along with labor and capital. In special economic and journalistic literature, one can find a variety of definitions of the essence of the spatial factor. The abundance of definitions is caused, in our opinion, by the differences in approaches to understanding the economic space, among which one can single out: the territorial approach [9], the approach to the economic space from the standpoint of geographic and state

borders [24], the resource approach [16], the information approach [11] and others. The most consistent with the objectives of this study is, as it seems, the territorial approach, according to which "Economic space is a saturated territory containing many objects and connections between them: settlements, industrial enterprises, economically developed and recreational areas, transport and engineering networks, and etc. However, this definition lacks such an element of the characteristics of space as the "location" of an economic entity"[17]. The idea itself is not new. Even K. Marx, in his doctrine of rent, pointed out the need to take this factor into account for the effectiveness of activity. K. Marx noted: "Two general reasons for this difference in results, independent of capital, are: 1) Fertility.... 2) Location of land plots. The latter circumstance is decisive for the colonies and in general for the sequence in which land plots can be introduced into cultivation one after another. ... These two different bases of differential rent, fertility and location, can work in the opposite direction. A plot of land can be very well located and very fertile, and vice versa. This circumstance is important because it explains to us why, when plowing land in a given country, the transition can be made in the same way from the best land to the worse, as well as vice versa"[13]. It was written in the 19th century, but the impact of location on the functioning of the economy remains in the 21st century. So, in March 2020, the estimated price for Russian Urals oil became negative, since within two days the cost of delivery to ports, taxes and other costs exceeded the cost of selling a grade in European ports. According to the Argus agency, the Argusfip quotation (Freeinpipe means that the seller must deliver the goods to the pipeline at his own expense) Western Siberia on March 30, was equal to minus 1007 rubles. per ton, and on March 31 - minus 1200 rubles. per ton. There are quite a lot of similar facts of the influence of the logistic factor and, in particular, the transport component on the economic situation in modern economic life.

Thus, it seems obvious that the spatial location of economic entities, their location on the economy, and, consequently, its security, play a significant role.

After the liquidation of the USSR, namely the liquidation, not the collapse, the abolition of the Warsaw Pact [27], the geopolitical position of the Russian Soviet Federative Republic (later Russia), as the successor of the USSR, changed dramatically. Previously, its geographical position, from a security standpoint, was quite favorable, since it was located in the central part of the country, far from the border. Neighbors were, as a rule, fraternal union republics or friendly-minded countries that are members of an intergovernmental economic organization - the Council for Mutual Economic Assistance [23]. Such a comfortable location allowed the republic's economy to develop without taking into account the limitations existing in the border regions. Since 1991, the situation has changed dramatically. As a result, 51 of the 85 constituent entities of the Russian Federation turned out to be a border region. The fraternal republics became independent states and, often, turned into the vanguard of replicating Russophobia. In their political, economic, military, cultural inconsistency, the leaders of these countries blamed Russia for all their problems and became the conductors of the anti-Russian policy. This led to the need to reformat the administrative and economic structures, the entire economy in these subjects of the Federation, taking into account their border position. It was not the economic feasibility of economic development that

came to the fore, but the problems of security, which, as a rule, are solved at the expense of the economy, ecology, and the social sphere.

In modern economic theory, when characterizing the spatial location of economic entities, the concept of "center-periphery" or "core-periphery" is often used - a model of interaction between central and peripheral regions in the process of their development. The model is tried and tested, proven in practice and, in general, focused on strengthening the central government. The classic development of this concept is presented in the work of D. Friedmann [12]. According to it, each territory has its own special patterns of development, which leads to the concentration of effective economic activity in separate cores, from where it spreads to peripheral regions. The process of spatial polarization inevitably gives rise to imbalances between the center and the periphery. At the same time, the center throughout the entire life cycle of this model stably dominates the periphery. This is manifested: in the creation and development of power bodies in the center and at the local level, changing the administrative-territorial division, managing migration processes, influencing the nature and direction of external relations of regions, reducing geopolitical tensions of internal or external origin. In the Middle Ages, this was the relationship between a suzerain and a vassal. Therefore, the "center-periphery" model is most likely suitable for studying the modern political process, rather than solving the problem of economic security. The conflicting interests of the participants (the expansion of the powers of one of the parties can occur only by cutting the other) does not allow us to consider it as a basic one in the relations of regions that ensure economic security.

It was noted above that there are various types of security, but all of them are united by the fact that it is possible to achieve the goal only in the process of fighting the opposing side. And the victory in the struggle, as you know, is predetermined by the degree of unity and solidarity in the camp of the rivals. Our study deals with the influence of the spatial factor on security, therefore, using the center-periphery relationship model seems to be a mistake, since it divides rather than unites the stakeholders. It is proposed to use the "border - rear" model. At the same time, operate with such concepts as "border regions", "rear regions" or "regions of the rear".

This concept combines economic security and economic agents, ecology and infrastructure into one common system. The uniqueness of this approach lies in the fact that the safety of the socio-economic system is determined not only by the safety of the environment and infrastructure, but also by the general safety of socio-economic entities (communities, associations, organizations and authorities at different levels), i.e. the ability of these components to be resistant to various "shocks" and thereby ensure security in the complex.

As for the concept of "border regions", this category, to a certain extent, has received explanations and different interpretations in the specialized literature. They have one thing in common: these regions are significantly influenced by the state border. The situation with the rear regions is more complicated. Even the omniscient Internet does not provide a definite answer to this question. At the same time, it can be found in it how various concepts of rear services, problems and the role of logistics support from the campaign of Alexander the Great through the desert in Egypt to serving

troops in modern conditions of the 21st century are considered. However, it should be noted that most studies are carried out from the standpoint of the requirements and requests of the army, including the provision of military (combat) operations. It seems to us that the concept of "rear region" carries a wider range of meanings than the term logistics, since it is associated not only with the movement of material resources, financial and transport measures, but also includes such areas as the production of weapons and food, repair and recovery services, treatment and recovery complexes and so on. In addition, the "rear region" should provide production sites for evacuated equipment from the occupied regions, conditions for receiving and living the evacuated population, the development of housing and communal services, social and cultural institutions, etc.

In this regard, the rear region must have all the necessary, and in sufficient quantities, material, financial, natural, demographic resources in order to guarantee not only the sustainable development of this territory, but also be ready to respond to such external challenges as comprehensive support of combat action, as well as the creation of conditions for future victory. Each "border region" must have its own rear, where you can retreat, regroup, mobilize opportunities and return temporarily abandoned territories, as well as restore the destroyed economic potential. Consequently, the link "border - rear" meets the interests of both one and other spatial formations, and their joint, coordinated activity is the guarantor of the economic security of territorial entities.

IV. CONCLUSIONS

Thus, based on the study, we draw the following conclusions.

1. Economic security is part of a country's national security. The emergence of the concept of "economic security" is associated with the situation when the economy is in a critical state and requires the search for fundamentally new ways out of the existing conditions. Security is presented as one of the qualitative characteristics of the economy, which determines its minimum level of development at this historical stage.

2. Economic security is a function of many variables, including the spatial factor, in which such a component as location occupies a special place. The regulation of relations between central authorities and territories is based on the concept of "center-periphery". However, this model of political governance of the state vertically and from the standpoint of economic security management is unacceptable. A variant of its replacement can be the "border - rear" link.

3. It is possible to ensure economic, and with it, state security, provided that the border regions and rear regions develop in a balanced manner, when their economic, natural, organizational, cultural, scientific potentials correspond to the tasks set. And the leadership of these regions will realize that their interests coincide, and only joint, coordinated activities can guarantee economic security.

4. It is necessary for each border region of the Federation to determine the personal rear area and develop appropriate programs for their joint development, taking into account their characteristics, individuality, specifics and allowing not only to ensure the proper level of economic security, but also

the demanded standard of living of the population living in them.

5. Based on this, we can conclude that the requirements for modern economic security allow us to update a number of provisions: first, to consider the state economy as a system of regional economies that have their own development potential; secondly, in the process of forming the mechanism of economic security, it is necessary to take into account both the federal policy of regional development and the practice of economic security at the regional level; thirdly, the sectoral and spatial components of economic security must be balanced with each other; fourthly, the effectiveness of the economic security of the system should be analyzed both through changes in quantitative indicators and qualitative changes. Based on the presented conclusions, the study and analysis of the potential of economic security can be the object of future research.

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REFERENCES

- [1] D.A. Baldwin, "The Concept of Security", *Review of International Studies*, vol. 23, 1997, pp. 5-26.
- [2] B. Buzan, O. Waever, J. Wilde, *Security: A New Framework for Analysis*, Lynne Rienner Publishers Inc. London, 1998, 238 p.
- [3] J. Hohlfeld, *Dokumente der deutschen Politik und Geschichte von 1848 bis zur Gegenwart. Die Weimarer Republik*. Berlin u. München, 1952, 506 p.
- [4] J. Friedmann, *Regional Development Policy: A Case Study of Venezuela*, MIT Press, 1966, 279 p.
- [5] D.M. Kennedy, *Freedom from Fear : the American People in Depression and War, 1929-1945*: New York ; Oxford University Press, 2001, 988 p.
- [6] D. Losman, *Economic Security a National Security Folly*, *Policy Analysis*, 409, 2001.
- [7] Sh.R. Ronis, *Economic Security is National Security*. Proceedings of National Defense University Symposium on National Security. Washington, USA, 1997.
- [8] L.I. Abalkin, *Russia's strategic response to the challenges of the XXI century*. Moscow, 2004.
- [9] A.A. Arbatov, *Economic security of Russia: General course: textbook*, Moscow, BINOM. LZ, 2018, 815 p.
- [10] K.L. Astapov, *Foreign economic and financial aspects of Russia's economic security*, Moscow, 2002.
- [11] L.S. Belousov, "Fashizm", *Great Russian Encyclopedia*, vol. 33, Moscow, 2017, pp. 214-217.
- [12] V.A. Bogomolov, *Introduction to the specialty "Economic security"*, Moscow, UNITI, 2018, 279 p.
- [13] *Warsaw Pact. History and modernity*, Moscow, 1990.
- [14] A.G. Granberg, *Fundamentals of regional economics*, Moscow, GU HSE, 2000, P. 25.
- [15] E. Ivanov, *Information as a category of economic theory*. URL: <http://rvles.ieie.nsc.ru:8101/parinov/ivanov/ivanov1.htm> (accessed 02.12.2020).
- [16] A. A. Bessmertnykh, V. P. Zolotukhin, A. E. Kunina et al. *History of the USA: in 4 volumes*, Minsk, pp. 1983-1987.
- [17] K. Marx, "Capital", vol. 3 (39), 1956, p.708-709.
- [18] V.V. Krivorotov, *Economic security of the state and regions*, Moscow, 2017, 351 p.
- [19] S.V. Kupriyanov, A.A. Shapovalov., M.G. Chesovskaya, "The influence of the spatial factor on economic security. Guarding the Economy", *Scientific and Practical Journal* vol. 2(13), Nizhny Novgorod, 2020, pp. 200-208.
- [20] I.A. Kuchin, I.A. Lebedev, "Fractals and cycles of social processes" , *Fractals and cycles of systems development*, Tomsk: IOM SB RAS, 2001, pp. 25-30.
- [21] *Small atlas of the world. PKO "Cartography" of the Main Directorate of Geodesy and Cartography under the Council of Ministers of the USSR*, Moscow, 1981.
- [22] L.G. Novikova, "Civil War" 1917–22, *Great Russian Encyclopedia*, vol. 7. Moscow, 2007, pp. 591-598.
- [23] I.B. Orlov, *New Economic Policy: History, Experience, Problems*. Moscow, 1999. URL: <https://histrf.ru/lenta-vremeni/event/view/> (accessed 22.12.2020).
- [24] T.A. Rudakova, I.N. Sannikova, O.Yu. Rudakova, "Economic security of the region: essence, factors, monitoring tools", *National interests: priorities and security*, 2018, 14 (6), pp. 1072-1091. <https://doi.org/10.24891/ni.14.6.1072>.
- [25] V. L. Tambovtsev, R.M. Katchalov, *Enterprise in an unstable economic environment: risks, strategies, security*, Moscow, 1997.
- [26] E. Sheinis Ya, "Council for economic mutual assistance", *Great Russian Encyclopedia*, vol. 30, Moscow, 2015, p. 545.
- [27] N. Shumsky, "Economic integration of the states of the commonwealth: opportunities and prospects", *Economic Issues*, vol. 6, 2003, pp. 122-134.