Economic security of modern Russia: the current state and prospects

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Abstract. In the conditions of instability of the world economy and the introduction of sanctions against Russia by a number of countries, the problem of ensuring national economic security has become particularly relevant. This topic also has a high scientific, practical and social significance, as it allows to identify possible gaps in the economic security of modern Russia and timely develop mechanisms to eliminate them to protect the national interests of the state. The purpose of this article is to determine the state and prospects of improving the economic security of modern Russia. This can be achieved by solving the following tasks: review of existing methods to evaluate the economic security of country, conduct a SWOT analysis of economic security of modern Russia, the development of suggestions for its improvement. This research analyzes various aspects of the economic security of modern Russia. As a result, the author developed an integrated method to ensuring the economic security of the country, as well as a matrix of economic security within this method. The way of increase of economic security of modern Russia is offered. Thus, to overcome the threats for the economic security of modern Russia, it is necessary to implement the recommendations developed by the authors, including the establishment of their own production and the construction of an innovatively oriented model of the economy. This will ensure the economic security of modern Russia and its stable development in the future.

1 Introduction

Every year, it is increasingly difficult to analyze and predict changes in the financial, economic and political sectors of business. In accordance with this, interest in indicators of measuring sustainability as the highest degree of economic security of the country has recently increased significantly.

Stability refers to the balance between the economic, environmental and social components of society.

In the field of economic security, country risk is important. Some researchers under the "country risk" understand the possibility of negative events which will change the prospects of investments profitability.

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Another way takes a practical position and defines risk as a negative result, that is, a risk arises when decreasing or losses of investment profitability are expected.

Thus, the concept of risk is considered in two ways: either as a variance of productivity, or simply as a probability of a negative outcome, which reduces the initial expected return.

Based on different definitions of country risk, two main methods to determine the country's economic security can be identified.

According to the first **process method**, economic security is the possibility of occurrence of negative risk events which will change the prospects of investments profitability in the national economy and reduce the rate of its economic growth.

In accordance with the second **outcome method**, the country's economic security is the state's ability to withstand negative factors which could lead to a decline in living standards of the population, a loss of self-sufficiency in the economy and a weakening of national sovereignty [1].

2 Materials and Methods

In the framework of this research, the authors propose to use an integrated way to identify the economic security, and to consider the economic security of the country as the likelihood of negative risk events and threats and the country's ability to resist them in order to stable sustainable development of the national economy. Table 1 provides a comparative analysis of existing methods and the proposed author's way to determine the country's economic security.

Table 1. Comparative analysis of existing and proposed author's methods to determine economic security of the country.

Comparison criteria	Existing methods		The proposed integrated method
	Process method	Result method	
The essence of country risk	The likelihood of negative events which will change the prospects profitability investments	The loss or, at least, the decline in the expected profitability investments	The possibility to implementing a negative scenario for the development of the national economy
The object of economic security	Negative risk events and threats to economic security	The ability of the country to withstand negative risk events and threats	Negative risk events and threats, as well as the ability of the country to resist them
The result of the loss of economic security	Reduction of investment attractiveness and economic growth rate of the national economy	Decline in living standards, loss of ability to self-sufficiency in the economy, weakening of national sovereignty	Reducing the stability of the national economy

In accordance with the data in Table 1, the existing ways to determine economic security and the author's method differ in essence of the country's risk, in terms of the object and the result of economic security. The main advantage of the proposed way is that it combines the features of two existing method and therefore allows a more complete picture of the country's economic security.

In the framework of a comprehensive method, we consider the matrix of the country's economic security (Table 2).

Table 2. The country's economic security matrix.

The likelihood of negative risk events and threats	The ability of the country to withstand negative risk events and threats		
	High	Medium	Low
High	High chances of preserving national security	Serious problems for economic security	Critical situation for ensuring economic security
Medium	Good prospects to maintain national security	Serious problems for economic security	Serious problems for ensuring economic security
Low	Favorable situation, good prospects to preserve national security	Good prospects to maintain national security	High chances of preserving national security

Also, a comprehensive way to determine of economic security contains quantitative parameters of economic security. The results of the assessment of Russia's economic security in 2017 using quantitative indicators within the framework of the author's integrated method are presented in Table 3. Analysis of the data in Table 3 indicates that for all the indicators indicated in 2017, Russia demonstrated high risks, threats to its economic security.

Table 3. Assessment of Russia's economic security in 2017 using quantitative indicators.

Indicator of economic security	The value of the indicator for Russia, %	Interpreting the value of an indicator
The rate of inflation	4	High inflation rate
Unemployment rate	5	High unemployment rate
Share of the largest industry sector: – in the structure of GDP – in the structure of exports	19,5 65,9	The economy is mono-profile, its dependence on the oil and gas industry is extremely high
Increase in the volume of foreign direct investment in the economy	4	The volume of investments in the economy is small, which does not allow to establish production and develop
GDP growth rate	1,8	The economy is in a state of stagnation

To identify prospects for improving economic security, we will conduct a SWOT analysis of the economic security of modern Russia (Table 4), which will identify both threats and prospects for the economic security of our country.

The key threats to economic security are sanctions measures by some countries in the world that violate trade and cooperation, as well as joining the WTO. An integral part of the latter is increased competition on Russian market, which can either lead to massive bankruptcy of domestic enterprises as a result of inability to adapt to new conditions, or increase their competitiveness and access to world markets.

In addition, the high possibility of the so-called "Dutch disease" and the inability to establish its own national production is a serious threat to the Russian economy.

Among the **positive prospects and opportunities** to ensure Russia's economic security can be attributed:

- the forced increase in the competitiveness of Russian enterprises due to the cancellation of protectionist measures as a result of the implementation of WTO agreements and the introduction of the free trade regime;
- the cancellation of economic sanctions and the restoration of trade relations with countries of the world;
- the entry of Russian enterprises into world markets due to the reduction of trade barriers in the conditions of WTO membership and the ability to establish domestic production.

Table 4. SWOT-analysis of economic security of modern Russia.

Advantages in ensuring economic security	Problems in ensuring economic security
High resource availability of the economy	Absence of own national production and orientation of the economy to the extraction of minerals
High production capacity left over from the Soviet Union	An unfavorable business and investment climate hampering the development of enterprise
Positive prospects and opportunities to ensure economic security in Russia	Possible threats to the economic security of Russia
Forced increase in the competitiveness of Russian enterprises due to the cancellation of protectionist measures as a result of the implementation of agreements with the WTO and the introduction of the free trade regime	High possibility of occurrence of "Dutch disease", inability to establish own national production
Cancellation of economic sanctions and restoration of trade relations with countries of the world	Expansion of sanctions measures and termination of trade relations with a number of countries
The entry of Russian enterprises in the world markets due to the reduction of trade barriers in the conditions of WTO membership, the ability to establish domestic production	Increased competition in Russian markets in the context of WTO membership, massive bankruptcy of domestic enterprises as a result of inability to adapt to new conditions

It should be noted that Russia possesses a high resource-availability of the economy and high production capacities (the legacy of the Soviet economy). However, despite the availability of fixed capital, most post-Soviet enterprises are closed due to the inability to function in market conditions, namely due to a lack of adaptability and flexibility.

The problems of ensuring economic security of Russia should be attributed:

- lack of national production;
- the orientation of the economy on the extraction of minerals;
- unfavorable business and investment climate, which hampers the development of enterprises.

3 Results

Thus, the possibility of negative risk events in Russia is quite high, and its ability to withstand these negative risk events remains average, which is the serious problems for ensuring economic security in accordance with the matrix of economic security (Table 2).

Since the formation of modern Russia (early 1990's) and up to the present time, active measures are being taken to improve the economic security of the country:

- according to the Western model, the market model of the economic system was adopted;

- introduced a system of free trade;
- the technologies used in the developed countries of the world were applied [3].

However, it is clear that these measures contributed to securing Russia's status as an "outsider" in the world economy, which does not allow it to ensure economic security at the level necessary for the country's development, because the earlier measures were of an evolutionary nature. But if we go only on the evolutionary path of development, the economic systems of the developed countries of Europe and America, which have «set foot on this path» before others, will always be in the lead.

To change this situation, revolutionary measures are needed that would ensure not only a quantitative but also a qualitative change in the economic system of modern Russia.

Under the revolutionary measures, the authors understand the development of innovative technologies (space, nanotechnology, biotechnology) which would allow to provide a powerful leap forward for the Russian economy and turn it into a world leader. The development of innovative technologies and their subsequent implementation involves the implementation of innovative projects that involve certain risks.

4 Discussion

As a method proving the optimal sentences in this research, game theory is selected (Table 5). Evolutionary measures assume the preservation of the current situation and do not require additional investment, so the cost of their implementation is equal to the annual cost of innovation in Russia, which is about 150 billion rubles.

According to the forecast of the socio-economic development of the Russian Federation for 2018, prepared by the Ministry of Economic Development of Russia, the GDP growth rate this year is expected to be at 3%, i.e. its growth will be about 200 billion rubles. The likelihood of achieving such result is very high, since evolutionary measures are almost risk-free. As a result, the expected economic effect can reach 50 billion rubles per year.

Revolutionary measures request to increase investment in innovation more than three times. As a result, we can expect GDP growth of at least 5% (400 billion rubles.), And ideally - 10% (700 billion rubles.). The economic effect may be about 80 billion rubles. Obviously, this is much more than 50 billion rubles in the first case, which clearly confirms the higher effectiveness of revolutionary measures in comparison with the evolutionary ones, and proves the expediency of their implementation in modern Russia.

The authors suggest that the revolutionary measures and the innovative development of Russia's economy will ensure in the near future the annual average economic growth of 10%.

Table 5. Comparison of evolutionary and revolutionary measures using the tools of game theory.

Measures	Cost (volume of investment), billion rubles	The result (GDP growth), billion rubles	Possibility	Economic effect, billion rubles
Evolutionary	150	200	1	$200 \cdot 1 - 150 = 50$
Revolutionary	500	400	0,4	$(400 \cdot 0,4 + 700 \cdot 0,6) - 500 = 160 + 420 - 500 = 80$
		700	0,6	

For a deeper scientific explanation of using revolutionary measures, the authors suggest to use a synergetic method. According to this method, the economic system is on its phase trajectory - a plane that determines the possibilities and limits of its development, in

particular, the rate of economic growth. Each phase trajectory is characterized by a certain level of entropy, which determines the possibilities of development. The most important factor in the transition to a new phase trajectory is the synergy effect resulting from the accumulation of a critical mass of growth vectors of the economic system (Figure 1).

Fig. 1. The transition of the economic system to a new phase trajectory as a result of the effect of synergy.

As follows from Figure 1, modern Russia is on a phase trajectory 1, characterized by a low level of entropy. Consequently, our country has less opportunities for development, which implies a lower level of GDP compared to developed countries which are on phase path 2 with a higher level of entropy and GDP. It should be noted that the time curve is common for both trajectories, but they develop in different ways due to the different level of entropy.

Evolutionary development of the economic system involves moving along a curve within its phase trajectory (solid line on the graph); revolutionary - the transition to another phase trajectory (dotted arrows on the graph). To improve the economic security of modern Russia, one can not stay on the old phase trajectory, it is necessary to move to a new, higher one; but this requires a qualitative transformation of the existing economic system in Russia (Figure 2).

Fig. 2. Synergetic mechanism for improving the economic security of modern Russia.

As shown in Figure 2, it is possible to launch a synergetic mechanism for improving the economic security of modern Russia by using points of economic growth which should be innovative and provide development of the economic system, allowing to exceed other systems. As a result of accumulation of economic growth points, a synergy effect arises and a bifurcation point is formed, with which a transition to a new phase trajectory is possible. Thus, in the context of further integration of the Russian economy into the world economy (in connection with accession to the WTO) and the imposition of sanctions measures on the part of several countries of the world against Russia, there is a rather unfavorable situation threatening the economic security of modern Russia [4].

5 Conclusions

The key problems in maintaining national security in Russia are:

- lack of own production;
- the orientation towards mining, which causes a high degree of dependence on imports;
- lack of investment resources due to unfavorable investment and business climate.

Despite on the rich resource base and the availability of human capital, the lack of investment and entrepreneurial activity inhibits the development of national production. To overcome threats to the economic security of modern Russia, it is necessary to transform the economic reality, by means of implementation of synergy mechanism for increasing economic security. This mechanism assumes an orientation to certain spheres of management, in which our country can win world leadership and create innovations. This will allow it to reach a new level of development and achieve a higher entropy value, which in turn will ensure economic security and stable development of modern Russia.

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