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TRADE SANCTIONS AND ECONOMIC STABILITY: DATA FROM KAZAKHSTAN

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ABSTRACT

The primary objective of this study is to examine how the sanctions imposed against Russia affect the stability of Kazakhstan's economy using a developed integral index of economic stability.

The study is based on a set of methods for calculating an integral indicator of economic stability. To analyze the available scientific developments in this field, we applied the methods of comparison and analysis.

The initial data were processed using consistent normalization methods, such as the maximum/minimum method. After that, integral indicators were calculated.

The results showed a decline in the main macroeconomic indicators in Kazakhstan the year after the imposition of sanctions, which is clearly reflected in both the overall and individual indices of economic stability. Further analysis reveals that the sanctions against Russia lead to structural imbalances in Kazakhstan's economy, but also benefit the growth of its economy and stimulate its foreign trade. This article contributes to existing research on the impact of sanctions on countries neighboring Russia. It is recommended to analyze the effect of anti-Russian sanctions on other members of the EAEU in the future.

*The originality o*f this study lies in the development of a new methodology for calculating an integral stability index based on nine indicators. This stability index helps us to study the impact of global economic sanctions on Russia on the stability of the Kazakh economy. It allows us to better understand and determine the future direction of Kazakhstan's development.

Keywords: economic sanctions; neighboring countries; integral index of economic stability; Kazakhstan; Russia.

INTRODUCTION

As the global economic crisis of 2008 has shown, a stable national economy is very important, especially in the face of uncontrollable external shocks such as currency fluctuations, rising external debt, and inflation, which can lead to a prolonged economic crisis in the country.

Many studies aimed at studying economic stability in individual countries or groups of countries consider exogenous and endogenous factors affecting it. However, there is extremely little work related to the impact of sanctions against a neighboring country.

Countries have long used sanctions as coercive measures aimed at achieving certain political goals, often as an alternative to war. The popularity of sanctions has increased significantly in recent years, with the number of countries sanctioned increasing over time [1].

Since 2014, against the background of Russia's invasion of Ukraine, sanctions imposed by the EU, the United Kingdom, the United States, Australia, Canada, Japan, New Zealand and other countries [2] have been in effect against Russia. The intensification of anti-Russian sanctions occurred after February 2022. Thus, the EU has introduced 14 sets of sanctions that have created new economic conditions in Russia, import substitution policies, and the formation of technological sovereignty [3,4].

At the same time, Russia is a member of the Eurasian Economic Union, whose total GDP in 2023 amounted

to 2.4 trillion US dollars. At the same time, 84.4% of the total GDP accounted for Russia, 10.9% for Kazakhstan, 2.3% for Belarus, 1% for Armenia, 0.5% for Kyrgyzstan [5].

By the end of 2023, Russia ranks first in terms of imports of goods to Kazakhstan (27.9% of total imports), and third in terms of exports of goods (12.9%) [6]. In foreign trade in services, Russia accounts for the largest volume of exports and imports [7]. At the beginning of 2024, there are more than 44.4 thousand legal entities and branches with foreign ownership in Kazakhstan, of which 19.5 thousand are Russian [8].

Under these conditions, the impact of anti-Russian sanctions on the development of the Kazakh economy can be both positive and negative. The multidirectional effects of sanctions (including their empirical assessments) on trade with neighboring countries are revealed in the works [9-11].

The positive effects for Kazakhstan are associated with the substitution of goods (non-military) and services previously supplied by Western countries and banned from importation into Russia, goods and services produced in the Republic of Kazakhstan. The development of new markets contributes to an increase in the utilization of production capacities of Kazakhstani enterprises, an increase in employment and income in the economy.

The negative effects manifest themselves in several ways.

Firstly, the increase in costs associated with the change of transport routes and the search for new contractors. It was necessary to find new suppliers of goods from foreign manufacturers that were previously located in Russia, as well as to find new logistics routes for goods imported through Russia.

Secondly, there are risks of secondary sanctions against Kazakhstani companies re-exporting sanctioned goods, dual-use goods and "high priority" goods to Russia. In 2024, 8 Kazakhstani companies were included in the US and EU sanctions list [12].

Thirdly, there are risks of secondary sanctions by the US Treasury Department against foreign financial institutions conducting transactions on behalf of or in favor of sanctioned entities or transactions related to the Russian military-industrial complex [13].

Given the contradictory findings and unexplored aspects of previous research, an important question has arisen: How do the sanctions imposed on Russia affect the short– and long–term economic stability of Kazakhstan's neighboring country?

The purpose of this study is to deepen our understanding of the relationship between sanctions imposed on large neighboring countries and their effects on small economies, which were not previously considered in empirical studies. The scientific novelty of this research lies in the development and testing of a comprehensive econometric model that, for the first time, allows for the quantification and distinction between direct (trade, financial) and indirect (institutional, transactional) channels of sanctions shock transmission within an economic integration context.

Furthermore, it introduces a new composite indicator of "economic stability" for a third-country economy, accounting for its structural dependence on the target country and its institutional capacity for adaptation.

This study complements existing literature in several ways. First, it is one of the first attempts to examine the impact of military data on economic growth using a disaggregated approach.

The practical significance of the work is determined by the fact that the obtained results and the developed model can be used by governments of countries facing sanctions pressure on key trade partners to develop preemptive crisis management measures. The findings of the study will allow Kazakhstan and other EAEU states to optimize logistics routes, diversify foreign trade flows, and refine currency control mechanisms to minimize the risks of secondary sanctions, thereby enhancing economic resilience. The results can provide valuable insight for making strategic resource allocation decisions and formulating external and internal economic policy.

The structure of the document is as follows: Section 1 provides a detailed analysis of relevant empirical studies. Sections 2 and 3 describe the technical characteristics of the integrated indicator used and the data set used in the study. In section 4, empirical data are analyzed, and in section 5 conclusions are offered.

Literature review. Economic sanctions are understood as deliberate government-initiated withdrawal or threat of withdrawal from trade or financial relations [14]. There are three main areas of impact of sanctions on a sanctioned country: restrictions on exports, imports, and financial flows (commercial financing, World Bank loans, and the International Monetary Fund), including the freezing or seizure of assets of the targeted country.

Sanctions usually restrict financial and trade ties with a country in an attempt to put pressure on its politicians. An interest in trade cooperation may encourage a country to engage in diplomatic negotiations and seek to settle things peacefully [15].

A significant amount of literature is devoted to the impact of sanctions on socio-economic and political changes in countries under sanctions [16-19]. At the same time, a number of studies show that strict sanctions often do not have the expected impact [20-22].

Other studies have noted their impact on key macroeconomic indicators: GDP, consumption, investment, trade, foreign direct investment, exchange rate, etc. [23]. In a study [17], based on an econometric model, the negative impact of sanctions on GDP was estimated (by 2.82% during the first two years). In the work [24], the decrease in GDP growth in the target country from the introduction of US sanctions is estimated at 0.5–0.9%. There are widespread studies assessing the effectiveness of sanctions against Iran, which has been under sanctions for more than forty years [25]. Thus, Farzanegan and Hayo [26] revealed the significant impact of international sanctions in 2012-2013 on the informal economy of Iran. However, these studies are based, as a rule, on working with panel data by country, rarely focusing on any particular state.

Moreover, sanctions imposed on one country can have side effects for other countries and for the global economy that are difficult to predict or measure due to the close inter-company relationships: despite the sanctions, the target country continues to have relations with the sending country through relationships with other countries, including its immediate neighbors [27,28].

The paper [10] raises similar questions: do neighboring countries bear the costs of sanctions, do they respond with countermeasures to mitigate the impact of sanctions, and how does the level and structure of trade between neighboring countries change if sanctions are applied to one of the countries. Econometric modeling using panel data showed that economic sanctions are accompanied by a decrease in exports or imports of neighboring countries.

The study [9] assessed the impact of sanctions on neighboring countries of Russia and Iran. At the same time, neighboring countries are categorized into those who do not join the sanctions and those who support them. The analysis showed that for the former, the export value increases for dual-use goods, while the physical volume of supplies increases for machinery. The authors note the importance of measuring both cost and volume indicators. The growth of the first indicators may be associated with an increase in transaction costs.

A Kazakh study [29] analyzed the impact of anti-Russian sanctions on trade relations between Russia and Kazakhstan. The author notes individual product lines with an abnormal increase in exports to Russia (electrical equipment, machinery). The negative effects include the potential costs of companies that are associated with compliance with the sanctions regime, as well as the problem of uncertainty, which reduces incentives for business development in Kazakhstan.

In another study [30], the negative effects are complemented by restrictive measures against financial institutions and companies where the shareholders are persons on the sanctions list. These restrictions may also apply to certain exports and imports, as well as dual-use technologies.

Thus, the impact of sanctions on the economy of countries that border on the target of economic sanctions or have close trade and economic ties with it has not been sufficiently investigated.

A number of studies have assessed the impact of sanctions using gravity models. Thus, S.T. Slavov [11] used regression analysis to examine and conclude, using the example of data from 82 selected countries, that UN sanctions generally have a negative impact on trade channels between countries, especially "target" countries, and also negatively affect neighboring countries, although this effect is less pronounced. Researchers [31] used the gravity equation to study the effect of US unilateral sanctions on trade volumes between the US and other countries, finding that smart sanctions had little effect, while comprehensive ones were much more effective. They also found that imposing US sanctions could contribute to increased trade with the EU and Asia.

Thus, the impact of sanctions on the economies of countries that border the target of economic sanctions or have close trade and economic ties with them has not been adequately investigated.

There are many theoretical and empirical studies that examine the importance of achieving macroeconomic stability and the impact of certain economic variables on it. Pioneering researchers of this phenomenon were Frenkel and Khan [32], Fischer [33], Easterly and Rebe-lo [34]. Part of the research was devoted to indirect factors of economic stability [35-36]. Some works [37-38] empirically revealed the dependence of economic stability on the exchange rate, inflation, unemployment, interest rate, trade deficit, external debt and budget deficit.

Mathematical approaches to assessing economic stability were also different: based on the Cobb–Douglas production function [39], measuring inflation as a proxy indicator of overall economic stability [40-42]. The index method occupies a large part of the research. Thus, in the work [43], based on the developments of Wang and Li [44], the Aggregate Index of Macroeconomical Stability (AIMS) is calculated for each year. A number of works [42-45] is devoted to the calculation and evaluation of the Misery Index, which is calculated at the junction of inflation and unemployment. However, the application of this approach has not passed the test of time, and in modern research other indicators have been added to inflation and unemployment [46].

Subsequent studies based on the index method used various approaches to calculations as a basis.: This is the calculation of The Macroeconomical Instability Index (MII) [47] is based on the methodology of calculating the Human Development Index (HDI) of the United Nations Development Program (UNDP). The work [48] is based on the compilation of an index based on the inflation rate, exchange rate, and financial balance as % of GDP in the Dominican Republic and Haiti.

Another work [49] is based on a combination of the two approaches listed above [47-48] in order to calculate the index of macroeconomic instability conditions.

The literature review highlights numerous studies that examine the relationship between sanctions and the state of the economy in both sanctioned countries and their neighbors. However, there is a lack of comprehensive research that would simultaneously examine the impact of sanctions on trade flows and on the economy as a whole, as well as its internal processes. This study aimed to fill these gaps by using an integrated index of economic stability to assess the impact of these measures.

RESEARCH METHODOLOGY AND DATA

The presented study is unique in that it uses three sub-indexes to calculate the economic stability index. Unlike previous studies, each of these sub-indexes evaluates a different aspect of the national economy's development. We also assumed that the number of structural indicators we selected was optimal and that they fully and accurately reflected the essence of the phenomena they measured, without duplicating each other.

By assessing the stability of the economy using a composite indicator, or index, we can combine the results from individual processes into a single overall picture. This has the advantage of providing an aggregated form of information that reflects the overall state of the economy, and it is easier to use than individual indicators [50].

However, in this case, there is a challenge in aggregating indicators: index values should not be overly volatile, as the index should reflect the gradual process of economic development. The dynamics of the index must not be skewed towards the dynamics of any individual component [51]. Thus, the weight assigned to any component should not dominate the overall index.

Several limitations associated with constructing an integral index can be addressed by adhering to the principles of choosing index indicators: relevancy, accuracy, reliability, data availability, timeliness, and comparability [52].

Data from the Bureau of National Statistics, the Agency for Strategic Planning and Reforms, the National Bank, the World Bank, and the International Monetary Fund, covering the period from 2005 to 2023, were used to create the integral index of economic stability in Kazakhstan (see Appendix).

To calculate the integral index, three sub-indices were first calculated, which characterize the social sphere, economic indicators, and external activity of the country. A list of these indicators is provided in Table 1.

Table 1 – Structure of the integral index of economic stability

Subindexes of the integral index of economic stability	Subindex components
The Social Stability subindex	Fund ratio, unemployment rate, inflation rate.
Subindex of internal stability	GDP per capita, gross domestic savings, value added of the manufacturing industry.
External Stability subindex	The degree of openness of the economy, foreign direct investment, the ratio of public debt to GDP.
Note – Developed by the authors	

At the same time, there are two types of indicators:

- indicators whose best result is the highest among other values (e.g., GDP per capita).
- indicators whose best result is the minimum among other values (e.g., inflation).

Each indicator was normalized [53-54]. Formulas (1) and (2) were used to normalize the first and second type of indicators, respectively:

$$S^{ma} = \frac{s - s_{min}}{s_{max} - s_{min}}, \quad (1)$$

$$S^{mi} = \frac{s_{max} - s}{s_{max} - s_{min}}, \quad (2)$$

where S^{ma} и S^{mi} – normalized values of the first and second types of indicators, respectively; s – the current initial value of the indicator; s_{min} – the minimum value for the period under study; s_{max} – the maximum value for the period under study.

Further, based on the arithmetic mean formula, the values of the subindexes are determined, and the integral index is calculated as the geometric average of the values of the subindexes:

$$\begin{cases} S_{social} = \frac{\sum_{i=1}^{l} a_i}{l} \\ S_{intern} = \frac{\sum_{i=1}^{m} b_i}{m} \\ S_{ext} = \frac{\sum_{i=1}^{n} c_i}{n} \\ es_{int} = \sqrt[3]{S_{social} \cdot S_{intern} \cdot S_{ext}} \end{cases} \quad (3)$$

where S_{social}, S_{intern}, S_{ext} – the values of the subindexes correspond to social, internal and external stability; a_i, b_i, c_i – normalized indicators of social, internal and external stability; l, m, n – number of analyzed indicators by subindex, es_{int} – the value of the integral index.

The values of all indicators, sub-indexes, and the integral index range from 0 to 1.

To calculate the overall integral indicator, we assume that the weights of all indicators are equal, as the standard deviation of all normalized indicators is relatively close. We also decided not to use expert opinions in this case, due to the potential risk of expert bias.

THE RESULTS OF THE STUDY

Prior to creating the index, we performed an analysis of the mutual dependence between all selected variables. The correlation matrix revealed that there is not a strong relationship between them: the selected indicators can safely be divided into homogeneous and independent groups.

The results of the calculations for the integral index and its subindices are presented in Table 2.

Table 2 – Values of the integral index of economic stability and its subindexes

Year	Integral index of economic stability	Subindex of social stability	Subindex of internal stability	Subindex of external stability
2005	0,347	0,368	0,302	0,377
2006	0,383	0,269	0,439	0,477
2007	0,426	0,297	0,463	0,563
2008	0,498	0,347	0,538	0,659

Year	Integral index of economic stability	Subindex of social stability	Subindex of internal stability	Subindex of external stability
2009	0,536	0,766	0,330	0,608
2010	0,563	0,778	0,485	0,474
2011	0,634	0,727	0,587	0,598
2012	0,644	0,868	0,516	0,596
2013	0,579	0,893	0,415	0,524
2014	0,559	0,874	0,425	0,471
2015	0,479	0,902	0,266	0,456
2016	0,541	0,680	0,349	0,667
2017	0,537	0,837	0,440	0,420
2018	0,538	0,861	0,543	0,333
2019	0,581	0,892	0,548	0,400
2020	0,610	0,849	0,570	0,469
2021	0,605	0,742	0,718	0,417
2022	0,600	0,658	0,772	0,427
2023	0,555	0,627	0,629	0,434
Note – Compiled on the basis of calculations				

The values of the integral and sub-indexes of internal and external stability worsened significantly in 2015, indicating the possible impact of the anti-Russian sanctions imposed in 2014 on the Kazakh economy (Figure 1).

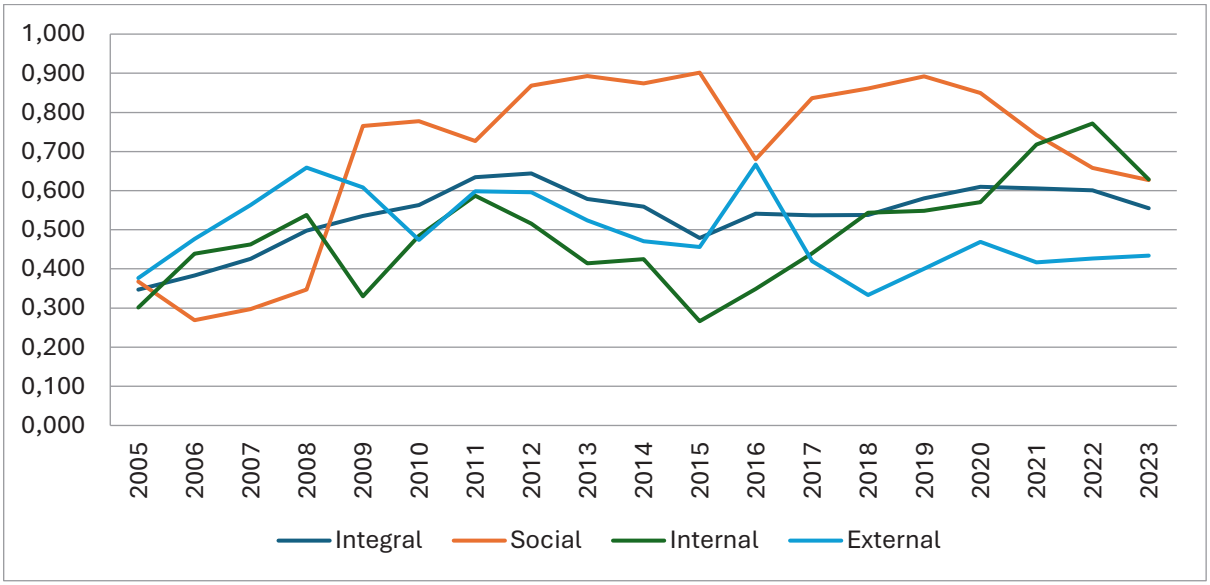

Figure 1 – Dynamics of the integral index of stability of the economy of Kazakhstan from 2005 to 2022
Note – Compiled on the basis of calculations

The social stability index also decreased significantly in 2016, which could be a result of the worsening economic situation. Similar trends were observed in 2023 after the implementation of new anti-Russian sanctions in 2022. Furthermore, all sub-indices of economic stability showed a deterioration, although the overall economic stability index did not decline as significantly as it did in 2015. At the same time, it is important to distinguish between the effects of sanctions and the pandemic. The sharp drop in indicators in 2020, primarily in the internal stability subindex, was associated with global disruptions caused by the COVID-19

pandemic, whereas the subsequent deterioration in 2022-2023 was largely due to the secondary effects of the sanctions against Russia. In other words, the short-term impact of the 2022 sanctions on the Kazakh economy was less severe.

The indicators of the first component (the social subindex) show significantly different dynamics (see Figure 2). While inflation was generally at an acceptable level, it increased significantly in some years, such as 2008, 2016, and 2022-2023. The overall price increase in Russia impacted Kazakhstan. Despite the target annual average inflation rate being in the range of 4-6%, Kazakhstan's actual price increase in 2022 was 20.3% annually. This inflationary surge was the result of the combination of two key factors: the sanctions shock, which disrupted supply chains and caused import prices to rise, and the post-pandemic imbalance, where aggregate demand recovered faster than supply. This was not solely due to the introduction of anti-Russian sanctions, but also due to the discrepancy between aggregate demand recovery after the pandemic-induced recession in 2020 and government support measures, which offset some of the negative effects. Unemployment has generally shown a positive trend, declining except in 2021 due to government measures and company relocations, significantly improving the situation since 2008 when the worst fund ratios were seen in 2005-2007.

Figure 2 – Dynamics of indicators included in the social stability subindex
Note – Compiled on the basis of calculations

According to the second component of the integral index (Figure 3), various dynamics of composite indicators can be observed. For example, gross domestic savings were at a higher level in 2005-2014, but they decreased sharply in 2015-2016, which negatively affected all sectors of production. The share of manufacturing in GDP also decreased in 2014-2015 and increased in 2016-2019, before decreasing again in 2020 due to the pandemic. Thus, the 2015 downturn was clearly sanctions-related, while the decline in 2020 was triggered by the pandemic. The increase in production costs in 2023, in turn, is a direct consequence of the sanctions pressure. The increase in prices of imported goods from Russia due to sanctions led to an increase in production costs in Kazakhstan in 2023.

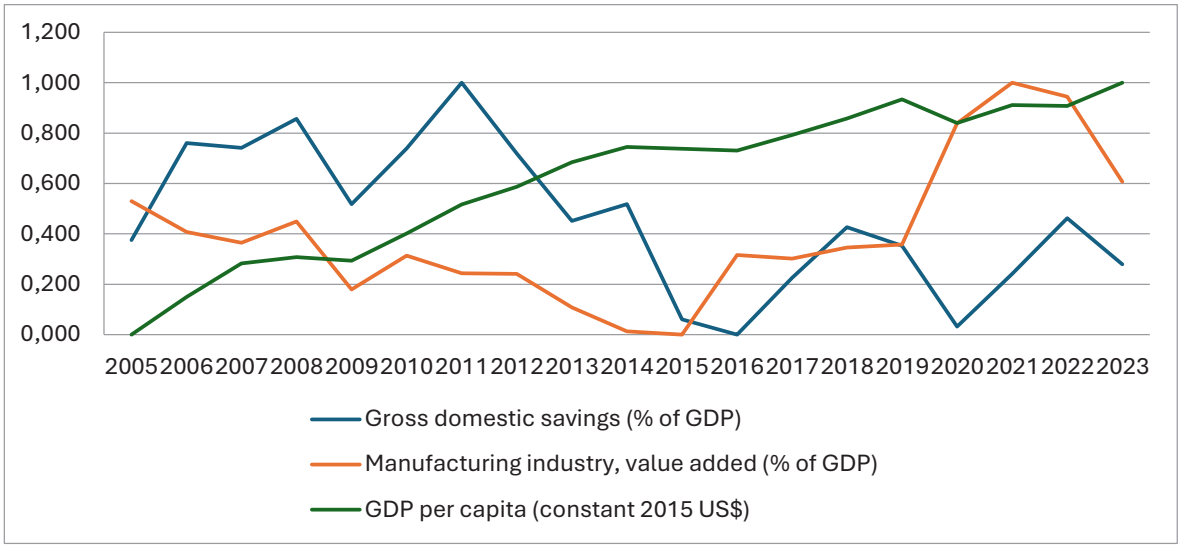

Figure 3 – Dynamics of the indicators included in the subindex of internal stability
Note – Compiled on the basis of calculations

The third component (Figure 4) shows that external debt is decreasing, which helps to reduce the dependence of the economy on external factors. Net flows of foreign direct investment are highly volatile, as reflected in the zigzag chart. Due to sanctions against Russia, Kazakhstan has been trying to increase its investment attractiveness.

The openness of the external economy has two trends: the first is a decrease in the maximum value of openness in 2005 and a minimum in 2015, and the second is a slow increase from 2016 to 2023. However, the 2020 pandemic dealt a severe blow to global trade, which temporarily slowed this positive trend. In the context of EAEU membership, sanctions against Russia in 2023 led to a decrease in foreign trade volume (61% compared to 68% in 2022). In the context of EAEU membership, sanctions against Russia in 2023 led to a decrease in foreign trade (61% compared to 68% in 2022). This has affected the overall sustainability of Kazakhstan's economy.

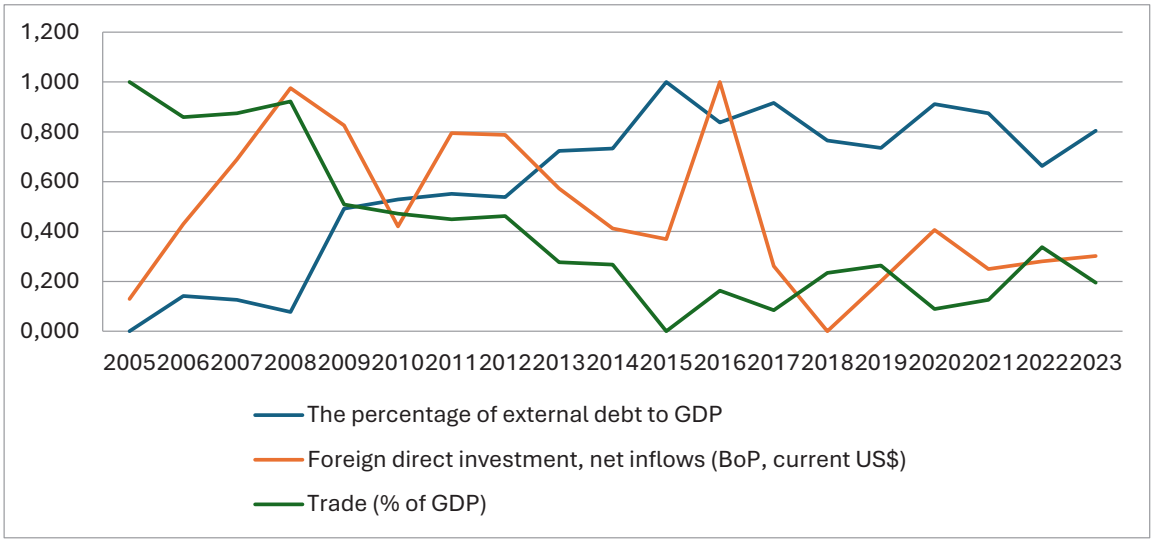

Figure 4 – Dynamics of the indicators included in the subindex of external stability
Note – Compiled on the basis of calculations

Thus, the paradox of the sanction's wave of 2022 is that, despite the exposure of the previous "pain points", Kazakhstan has also received new opportunities, due to which the stability of the economy has decreased to a lesser extent. The relocation of many technology companies, high-tech industries, as well as international cooperation, which within the framework of the EAEU makes Kazakhstan perhaps the largest "player" in the field, both in the supply of raw materials and in the field of investments, certainly played a decisive role here.

In summary, the Kazakh economy in 2022-2023 faced the combined consequences of two major shocks—the pandemic and the sanctions. While the pandemic crisis of 2020-2021 primarily affected the domestic production and social spheres through lockdowns and reduced global demand, the 2022 sanctions shock had a more complex impact, affecting foreign trade, supply chains, and import costs, but its negative effect was partially offset by new opportunities from business relocation. The reliability of the integral index is validated through its methodological framework, which ensures robustness, validity, and consistency. The index is constructed using nine statistical indicators grouped into three sub-indices, providing a more nuanced assessment compared to studies using only 4-5 variables. This comprehensive approach covers key economic dimensions, ensuring content validity.

The index has demonstrated empirical reliability by consistently reflecting decreases in Kazakhstan's economic stability following both the 2014 and 2022 sanction waves against Russia, confirming its sensitivity to external shocks. At the same time, the index also adequately captured the pandemic shock in 2020, confirming its ability to respond to crises of different natures. While acknowledging standard methodological limitations - particularly regarding weight assignment in composite indicators - the study maintains full methodological transparency to enable replication and future refinement.

In summary, despite inherent limitations common to all composite indices, the developed economic stability index shows sufficient reliability for analyzing sanction transmission effects, supported by its comprehensive structure, empirical performance, and transparent methodology.

CONCLUSIONS AND RECOMMENDATIONS

The original idea of the presented study is that 9 statistical indicators were used to calculate the integral indicator of economic stability, which are aggregated into three sub-indexes, and then into a generalized integral indicator of economic stability. Unlike most earlier studies, which used 4 or 5 variables when building the index.

Calculations show that Kazakhstan's economy is decreasing stability in the next year after the imposition of sanctions, a situation that was repeated both after the wave of sanctions in 2014 and in 2022.

The theoretical significance of this study lies in its contribution to a new scientific field related to sanctions for a pair of countries – Kazakhstan and Russia - and the complex effects of sanctions, based on the use of the integral index of economic stability. The impact of sanctions shocks depends on the sectoral structure of the economy (the share of both the extractive and manufacturing sectors), as well as the country's involvement in global economic relations. To clarify the impact of all these factors, it is necessary to build multiple stability indices, which we reserve for the future.

Based on the study's results, the following policy recommendations can be proposed for governments of countries facing sanctions pressure on key partners:

Development of preemptive macroeconomic stabilization programs that are automatically triggered upon the introduction of new sanction regimes against partner countries.

Establishment of monitoring and restriction mechanisms for the re-export of sanctioned goods to mitigate the risks of secondary sanctions.

Diversification of foreign economic ties and transport corridors to reduce dependence on the economy of the sanctioned country.

Strengthening the role of regional economic associations (such as the EAEU) in creating buffer mechanisms to cushion sanctions shocks.

It should also be noted that there are certain limitations that accompanied our study, including the very possibility of assessing the impact of sanctions on a neighboring country, as many researchers write about [19]. It is worth noting that in the framework of subsequent research, it is possible to change the composition of the

economic stability index. Another important limitation of the methodology used, which is mentioned by other researchers [55], is the arbitrariness in selecting the weights for the components of the integral index used.

A political implication of the study is the need to revise approaches to economic security in the context of sanctions confrontation. The obtained results indicate that even for countries not under direct sanctions, a significant risk of economic destabilization remains through channels of trade and financial cooperation. This necessitates the development of new formats of interaction within regional associations, as well as the establishment of clear protocols for coordinating macroeconomic policy.

This work provides a basis for a more detailed study of the relationship between sanctions against a country and the economies of its neighbors. The research focus of this work can be expanded to include a group of economies of the EAEU member states, since such an analysis can provide more information than studying a specific country.

For policymakers and regulators, the identified pattern of declining economic stability in the one-year period following the imposition of sanctions is of particular value, as it highlights the necessity of creating crisis reserves and developing rapid response scenarios.

APPENDIX

Table A1 Indicators for assessing the stability of Kazakhstan's economy

Year	Inflation, consumer prices, %	Total unemployment (% of the total workforce) (modeled by the ILO)	Fund ratio	Gross domestic savings (% of GDP)	Manufacturing industry, value added (% of GDP)
2005	7,58	8,13	6,76	38,89	12,04
2006	8,72	7,79	7,38	44,10	11,63
2007	10,85	7,26	7,17	43,84	11,49
2008	17,14	6,63	6,17	45,40	11,77
2009	7,32	6,55	5,33	40,81	10,87
2010	7,40	5,77	5,72	43,81	11,32
2011	8,45	5,39	6,09	47,33	11,09
2012	5,20	5,29	5,84	43,54	11,08
2013	5,94	5,20	5,62	39,93	10,63
2014	6,85	5,06	5,66	40,83	10,32
2015	6,68	4,93	5,60	34,65	10,28
2016	14,36	4,96	5,63	33,82	11,33
2017	7,44	4,90	5,89	36,88	11,28
2018	6,16	4,85	5,99	39,58	11,43
2019	5,33	4,80	5,97	38,59	11,47
2020	6,72	4,89	5,94	34,25	13,07
2021	8,04	5,56	5,96	37,09	13,61
2022	15,03	4,86	5,71	40,06	13,42
2023	14,72	4,85	5,96	37,60	12,30

end of the table

Year	GDP per capita (constant 2015 US$)	The percentage of external debt to GDP	Foreign direct investment, net inflows (BoP, current US$)	Openness of the economy (% of GDP)
2005	7 155,3	42,38	2 546 065 710	97,76
2006	7 837,6	59,88	7 611 168 450	91,45
2007	8 438,1	63,72	11 972 842 989	92,16
2008	8554,8	50,76	16 818 890 680	94,29
2009	8 487,5	54,84	14 275 888 207	75,77
2010	8 979,3	44,54	7 456 117 901	74,14
2011	9 506,7	32,57	13 760 291 529	73,12
2012	9 823,7	33,32	13 648 134 374	73,72
2013	10 264,3	32,06	10 011 293 285	65,41
2014	10 539,0	35,22	7 308 112 644	64,97
2015	10 510,8	30,77	6 577 824 050	53,05
2016	10 476,3	42,86	17 223 789 548	60,31
2017	10 758,5	37,83	4 757 396 811	56,83
2018	11 053,4	32,20	353 291 555	63,53
2019	11 402,8	32,57	3 730 856 271	64,86
2020	10 974,2	35,91	7 205 989 084	57,03
2021	11 298,4	34,39	4 566 688 865	58,67
2022	11 283,4	29,88	5 077 496 659	68,11
2023	11 700,8	26,99	5 437 312 391	61,77
Note – Compiled from the following sources [56-59]				

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САУДА САНКЦИЯЛАРЫ ЖӘНЕ ЭКОНОМИКАЛЫҚ ТҰРАҚТЫЛЫҚ: ҚАЗАҚСТАННАҢ АЛЫНҒАН МӘЛІМЕТТЕР

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АҢДАТПА

Бұл зерттеудің негізгі мақсаты – Ресейге қатысты енгізілген санкциялар экономиканың тұрақтылығының дамыған интегралды индексі арқылы Қазақстан экономикасының тұрақтылығына қалай әсер ететінін қарастыру.

Зерттеу экономика тұрақтылығының интегралды көрсеткішін есептеу әдістерінің жиынтығына негізделген.

Тұрақтылықтың интегралдық көрсеткіштерін есептеу саласындағы қолда бар ғылыми әзірлемелерді талдау үшін салыстыру және салыстыру әдістері қолданылды.

Бастапқы деректерді алдын-ала өңдеу нормалау әдістерін, атап айтқанда максимум/минимум әдісін дәйекті қолдануды қамтыды, содан кейін интегралды көрсеткіштерді есептеу жүргізілді.

Зерттеудің өзіндік ерекшелігі 9 индикаторды ескере отырып, интегралды тұрақтылық индексін есептеу әдістемесін жасау болып табылады. Алынған тұрақтылық индексі Ресейге қатысты енгізілген жаһандық экономикалық санкциялардың Қазақстан экономикасының тұрақтылығына әсерін зерттеуге көмектеседі. Бұл түсінуге мүмкіндік береді Қазақстанның одан әрі даму векторларын анықтау.

Санкциялар енгізілгеннен кейін бір жылдан кейін Қазақстанда негізгі макроэкономикалық көрсеткіштердің төмендеуін көрсетеді, бұл экономикалық тұрақтылықтың жалпы және жекелеген көрсеткіштеріне айқын әсер етеді. Бұдан әрі талдау көрсеткендей, Ресейге қарсы санкциялар Қазақстан экономикасындағы құрылымдық теңгерімсіздіктерге алып келеді, сонымен қатар оның экономикасының өсуіне ықпал етеді және сыртқы сауданы ынталандырады. Бұл мақала санкциялардың Ресеймен көршілес елдерге әсері туралы бар зерттеулерді толықтырады. Болашақта Ресейге қарсы санкциялардың ЕАЭО-ның басқа мүшелеріне әсерін талдау ұсынылады.

Түйін сөздер: экономикалық санкциялар; көрші елдер; экономикалық тұрақтылықтың интегралды индексі; Қазақстан; Ресей.

ТОРГОВЫЕ САНКЦИИ И ЭКОНОМИЧЕСКАЯ СТАБИЛЬНОСТЬ: ДАННЫЕ ИЗ КАЗАХСТАНА

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АННОТАЦИЯ

Основная цель данного исследования заключается в том, чтобы рассмотреть, как санкции, введенные в отношении России, влияют на стабильность экономики Казахстана, с помощью разработанного интегрального индекса стабильности экономики.

Исследование основывается на совокупности методик расчета интегрального показателя стабильности экономики. Для анализа имеющихся научных разработок в сфере расчета интегральных показателей стабильности были применены методы сопоставления и сравнения. Предварительная обработка исходных данных включала в себя последовательное применение методов нормирования, а именно метода максимум/минимум, затем был проведен расчет интегральных показателей.

Оригинальность предлагаемого исследования заключается в разработке методологии расчета интегрального индекса стабильности с учетом 9 показателей. Полученный индекс стабильности помогает в изучении влияния глобальных экономических санкций, введенных в отношении России на стабильность экономики Казахстана. Это дает возможность понять и определить векторы дальнейшего развития Казахстана.

Результаты исследования показывают снижение основных макроэкономических показателей в Казахстане через год после введения санкций, что четко отражается как на общих, так и на отдельных показателях экономической стабильности. Дальнейший анализ показывает, что санкции против России приводят к структурным дисбалансам в экономике Казахстана, но также способствуют росту его экономики и стимулируют внешнюю торговлю. Эта статья дополняет существующие исследования о влиянии санкций на соседние с Россией страны. Рекомендуется проанализировать влияние

антироссийских санкций на других членов ЕАЭС в будущем.

Ключевые слова: экономические санкции, страны-соседи, интегральный индекс экономической стабильности, Казахстан, Россия

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