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PREREQUISITES FOR THE SAFE DEVELOPMENT OF SOCIO-ECONOMIC SYSTEMS

Summary. The problem of harmonization of development and security of social and economic systems is considered. The specifics of the formation of socio-economic strategies in the context of globalization and threats of cross-border crises are revealed. Recommendations to ensure a co-evolutionary balance of development parameters and the safety of socio-economic systems are proposed.

Keywords: socio-economic system, co-evolution of parameters, development, economic security.

Formulation of the problem. The problem of the unstable development social and economic systems lies in the imperfection of the anti-crisis policy, in particular, in the inconsistency of development parameters and safety indicators in their social and economic strategies. Addressing current problems can not be exercised to the detriment of long-term development of socio-economic systems (SES). This problem is most relevant for countries with economies in transition, where reliable mechanisms for coordinating the interests of participants in socio-economic processes have not yet been created, and at the same time, governments seek to eliminate current imbalances at the expense of future generations.

Analysis of recent research and publications. For a normal socio-economic development of the country, investments should be at the level of 25% relative to the gross domestic product. In a stable economy, this indicator of investment security may be less, but in a situation where the economy needs a major upgrade of technology, this indicator should be at least 30% [1]. Assessing the need for investment in the economy, experts from countries with economies in transition often pay attention only to foreign investment, ignoring the possibility of attracting their own investment resources. At the same time, innovative development of the economy is possible only when residents feel an improvement in the investment climate and will give the appropriate signal to foreign investors.

An urgent task is to coordinate development and security priorities in socio-economic strategies. In the context of globalization, the national strategy must take into account the potential for convergence of macroeconomic indicators of different countries and the threat of cross-border crisis transfer.

Globalization generates positive and negative synergistic effects [2]. Transboundary transfer of the crisis can exacerbate disparities between countries [3]. These circumstances should be taken into account when developing a strategy for sustainable development. According to the definition of the International Commission on Environment and Development, "Sustainable Development" means that development that meets the needs of the present does not compromise the ability of future generations to meet their own needs" [4]. Stability in this case should be understood as the property of the system to adapt to changing conditions on the basis of self-regulation [5]. Privatization as a method of "shock therapy" does not automatically ensure economic development. The real basis for sus-

tainable development is: entrepreneurial activity [6], innovation [7] and the structure of the cluster network [8].

The disparity between development and security creates obstacles to convergence of the levels of development of countries in the global economic space. The safety of the socio-economic system can be ensured by a flexible system structure. Within the framework of the "hierarchy of complex systems" [9], the national security subsystem should perform the function of neutralizing threats to socio-economic development and the environment. The development of the SES development strategy due to the high level of complexity requires modeling that allows studying SES characteristics and choosing suitable management methods. Optimization methods are effective in solving technical problems, but these methods can not be used so effectively in solving economic problems. In complex economic systems it is often occurs dynamically changing data, which reduces the reliability of the optimization results.

A complex hierarchical system of organizational types can be represented as a simulation model graphically [9]. The subsystem of national security and functional subsystems can be represented in the form of graph vertices, and product streams in monetary terms are represented as arcs. The set of arcs of the graph as a whole is a market of goods and services that is under the control of the management subsystem. In modern conditions it is necessary to take into account the principle of globalization of security systems. Transition to sustainable development is possible only on a global scale, when the regimes of all objects and subjects of security will be coordinated. Measures to ensure security within the country should not contradict the global imperatives of sustainable development.

Allocation of previously unresolved parts of a common problem. In general, the study of the problems of sustainable development and the security of socio-economic systems has a long history. However, the national socio-economic strategies do not properly take into account the problems of cyclical development, cross-border transfer of business activity and cross-border crisis transfer, the phenomenon of asymmetric information in markets, the problems of harmonizing development and security parameters within the current and long-term periods.

Assessing the need for investment in the economy, experts from countries with economies in transition often pay attention only to foreign investment, ignoring the possibility of attracting their own investment resources. The state should guarantee freedom of entrepreneurship, protection of investors' rights, conditions for effective use of investments. Innovative development of the economy is possible only when residents feel an improvement in the investment climate and will give an appropriate signal to foreign investors. Modern technological progress is very capital intensive and requires a significant expansion of the loan. At the same time, the IMF (International Monetary Fund) calls on newly independent countries to pursue an inflation targeting policy by reducing the use of their own financial resources and attracting loans from the IMF

and other international financial institutions. In this connection, the problem of ensuring the financial security of the recipient countries of such loans comes to the fore.

Purpose of the article. The purpose of this study is to study the role of strategic management in ensuring social and economic development and national security of the state; clarification of the terminology and objectives of the strategy; identification of gaps in strategic management in transitional states; determination of approaches to the formation of sustainable development strategies; development of proposals on harmonization of development and security parameters in the long-term dimension.

Content of the main material. The crisis in countries with transitional economies is actualizing the study of the problem of forming a strategy for sustainable development. The socio-economic strategy can be viewed as a descriptive model in which the objective function reflects the main function of the system, and there are limitations in the form of resources, safety parameters, and environmental parameters. The objective function in the model of sustainable development is to improve the welfare of the nation. The author of the classical definition of strategy [10] defines the strategy as a sequence of steps leading to an ambitious goal. The concept of "economic strategy" is also interpreted as a method of establishing long-term goals (A. Chandler, M. Albert, F. Hedouri, M. Falmer) or a way of responding to opportunities and threats by creating competitive advantages (M. Porter, Charles Macmillan, Mr. Hamel). Some experts believe that the strategy begins when there is a choice for optimizing the transition to the future and reducing the way to achieve the goals [11]. The results of the strategy are not strictly fixed; they are located in a certain area with given limits of size and time [12].

In the process of strategic management, it is necessary to take into account: the relationship between development and security; the possibility of accelerating the implementation of modernization tasks; synergies between intersectoral, interregional and international cooperation. Sustainable development strategies must be balanced in resources and time. The absence of a strategy leads to imitation of changes, and verification of the actions of the executive is no longer possible. Transitional states still rely on the advantages of natural (primary) resources, while developed countries actively use competitive (secondary) advantages based on innovative factors. Significant convergence of macroeconomic indicators of countries with different levels of development has not yet been observed. The shortcomings of strategic management in countries with economies in transition are obvious. The main drawback of strategic management is that the development of government strategies is usually assigned to the same performers, despite the disappointing results of implementing their previous strategic developments. The competitive principle of selecting authors is not used. This is reflected in practical results of strategic management and leads to abuse of "shock therapy", which J. Stiglitz called extremism [13].

Everywhere the security requirements of external debt were violated. Excessive pressure on the budgets of the newly independent states occurs when the level of external debt relative to GDP is 30% [14]. However, this threshold is set at 60%, and the actual indicator is at an even higher level. The reason for the collapse of cooperation between the regions is the destruction of cooperative ties between enterprises and the inefficient use of the transit potential of countries. In the process of strategic planning, the principle of forming alternative strategies is not used. This limits the assessment of the ability to maneuver resources.

When experts develop a strategy, they often rely on government directives. They ignore the objective tendency to reduce the costs of extractive industries and increase the role of innovation, do not take into account the phenomenon of cross-border transmission of the crisis. The political idealization of certain cooperation vectors does not allow us to correctly predict the situation. At the same time, experience shows that political interests are always less reliable than economic interests. In countries with economies in transition working in the context of radical liberalization of foreign trade, domestic producers are becoming less competitive than large foreign corporations. The rapid liberalization of the monetary and financial sector creates prerequisites for transferring capital from the real sector to the financial sector.

Conclusions and offers. Based on the analysis of the shortcomings of strategic management, the following recommendations can be formulated. An objective approach to the development of a strategy can be provided only by a small and flexible group of independent experts. For example, the team of "brain trust" F.D. Roosevelt consisted of five members, other experts worked on a temporary basis. Competitive selection of experts allows to create an optimal team, to make a preliminary assessment of the novelty of ideas, to use adequate methods for solving strategic problems. This is confirmed by the remark of N. Kondratiev that "the historical laws of social science change with changes in society" [15]. Now scientists feel the need to return to the ideas of P. Sorokin, who proposed a theory of integralism based on the pluralism of interests and cooperation of all strata of society [16]. The solution of the problem of decentralization of management and environmental protection requires the revival of V. Vernadsky's scientific school. Strategic management should be based on the principle of gradualness, that is, provide a sequence of steps, not "shock therapy". The concept of gradualness [17] ensures the consistent implementation of reforms. At the same time, the state should mitigate the economic and social consequences of these reforms. For example, a gradual approach can be realized by implementing a consistent plan for capitalizing the national economy [18].

It is necessary to monitor the effectiveness of the implementation of the strategy and the results of economic convergence [19]. This allows us to ensure the actualization of the parameters of strategic development. In order to control the development process, it is necessary to plan intermediate and final goals. The actions of state bodies must meet these goals. It is necessary to establish an initial level of social standards, which should not degrade. One of the principles of successful strategic management is the adoption of decisions on the basis of consensus. Guided by this principle, the European Union plans to take measures to overcome new threats to the EU. The strategy at the national and regional levels should include mechanisms for social partnership and the consolidation of the interests of different sectors of society.

The use of synergistic mechanisms to achieve the ambitious goals of the strategy becomes one of the basic principles of strategic management. Synergetic effect arises as a result of intersectoral, interregional and international cooperation, it is reached by "the enterprise of the most important sectors of national economies in a unified system operating in real time" [20; 21]. At the same time, narrowing the structure of the economy and reducing the share of processing industries reduce the opportunities for economic development in countries with economies in transition.

In the strategic plan it is important to use the principle of international exchange of radical innovations and production experience in the region. This allows us to achieve a convergence of the level

of social and economic development of the states of the region and contribute to an increase in the overall level of regional economic security. A wide spread of innovations is possible on the basis of the use of the open innovation model Chesbrough [22]. Countries with a weak economy can improve their technical level, consistently moving from one product to another with greater added value. Thus, they constantly improve the production technology. The leader of the region provides an innovative breakthrough, opening up new opportunities for neighboring countries. Without such cooperation it is impossible to ensure the rapprochement of countries with different levels of development

From a strategic point of view, in order to maintain a stable level of economic development and the level of the well-being of the population, radical innovations must have a high interdisciplinary potential and ensure the use of the latest knowledge and research results. According to Reinert, E. radical innovations are born in breakthrough sectors, so these industries should be located in each country. Only a strategy based on the introduction of radical innovations can provide the country with a worthy place in the world markets. Symmetric economic relations between countries at the same level of development can provide an appropriate level of protection of national economies and social welfare of each of these countries. Asymmetric relations in trade, on the contrary, provoke intensification of differentiation between countries [23]. Finally, we must pay attention to the responsibility of all branches of power for the implementation of strategies. The presence of a strong and responsible government is a prerequisite for the formation and implementation of bold strategies. The experience of the "Asian tigers" shows that when the high results of industrial development of these countries are achieved, an important role belongs to a strong government that can organize innovative development and assume responsibility for the country's future.

Strategic planning in the region has features that reflect a specific economic, social and environmental situation. The development of a regional strategy includes the following stages: agreeing on a goal; socio-economic and environmental studies; SWOT analysis and definition of competitive advantages; development of strategy and programs for its implementation; verification of results. The main goal of the social and economic development of the region is to improve the well-being and quality of life. Therefore, the strategy provides for an appropriate system of priorities and indicators to monitor the implementation of the strategy. The presence of a regional development strategy contributes to the creation of a favorable business climate, investors can coordinate their actions with the priorities of the region and some preferences, use a common infrastructure to participate in the activities of regional and interregional clusters. Spatial planning and zoning ensure rational use of the territory, balanced socio-economic development. The existence of a regional strategy for socio-economic development is the basis for justifying the need for financial resources from the central budget, developing and implementing targeted programs, targeted investment projects that justify the appointment of the functionalization of special economic zones. The innovative content of the socio-economic strategy of the regions allows to fully develop the potential of the regions and ensure the effective development of their territories, as well as to ensure environmental safety.

In recent years, scientists have been paying attention to the role of asymmetric market information in deepening the differentiation of social and economic development of different countries [24; 25]. Neutralization of information asymmetry in markets can be based only on the dynamic development of the media industry, informa-

tion and communication technologies in all countries, the introduction of public-private partnership mechanisms and the revitalization of all institutions of civil society [26]. In the development strategies of the state, it is necessary to take into account the economic threats and consequences of hybrid wars. Hybrid aggression, as a rule, is aimed at destabilizing the enemy's economic and political system [27; 28; 29]. To counteract these destructive influences, it is necessary to improve the regulatory framework, institutional and technological capabilities of the national security system. The most effective means of ensuring security is the formation of competitive industrial clusters [3; 30].

Literature:

1. Suhorukov A.I. Investuvannya ukraïns'koyi ekonomiky: Monohrafiya / Za red. A.I. Sukhorukova. – K.: Natsional'nyy instytut problem mizhnarodnoyi bezpeky, 2005. – S. 176.
2. Ursul A.D., Romanovich A.L. Globalizatsiya, ustoychivoe razvitie i bezopasnost: sistemno-sinergeticheskiy pohod [Elektronniy resurs] – Rezhim dostupu: <http://spkurdyumov.ru/globalization/globalizaciya-ustoychivoe-razvitie-i-bezopasnost>.
3. Suhorukov A.I. Transfer krizisa i perspektivni razvitiya natsionalnoy ekonomiki v usloviyah globalizatsii v kn: Ekonomicheskaya bezopasnost: novaya paradigma formirovaniya i obespecheniya // pod red. E.M. Soroko, I.A. Belousovoy, T.I. Egorovoy-Gudkovoy. – Odessa, Institut kreativnykh tekhologiy, 2011. – S. 175-198.
4. Evteev S.A. Nashe obscheye budushee: Doklad Mezhdunarodnoy komissii po okruzhayushey srede i razvitiyu (MKOSR): Per. s angl. / Pod red. i s poslesl. S.A. Evteeva i R.A. Pereleta – M.: Progress, 1989.
5. Knyazeva E.P. Zakonyi evolyutsii i samoorganizatsii slozhnykh sistem / E.P. Knyazeva, S.P. Kurdyumov. – M.: Nauka, 1994. – 238 s.
6. Raytner E. Kak bogatyie strany stali bogatyimi, i pochemu bednyie ostayutsya bednymi / Per. s angl. N. Avtonomovoy, pod red. V. Avtonomova; Gos. un-t. – Vysshaya shkola ekonomiki. – M., 2011. – 384 s.
7. Shumpeter Y. A. Teoriya ekonomichnoho rozvytku. Doslidzhennya prybutkiv, kapitalu, kredytu, vidsotkiv ta ekonomichnoho tsykladu / Per. s angl. V. Starka. – K.: Vydavnychyy dim "Kyievo-Mohilyans'ka akademi, 2011. – 242 s.
8. Porter M. E. Konkurentsia: Per. s angl. – M.: Izdatelskiy dom "Vilyams", 2006. – S. 203-434.
9. Bertalanfi L. Obschaya teoriya sistem: kriticheskiy obzor. V sbornike perevodov Issledovaniya po obschey teorii sistem. M.: – Progress, 1969. – 520 s. (s. 23–82).
10. Klauzevits K. O voyne / Karl Klauzevits; [per. s nem.]. – M.: Eksmo; SPb.: Midgard 2007. – S. 155-215.
11. Chugreev V. Vvedenie v printsipy strategii [Elektronniy resurs] – Rezhim dostupu: <http://strateg.org/vvedenie-v-principy-strategii.html>
12. Kuzyik B.N., Yakovets Yu.V. Rossiya-2050: strategiya innovatsionnogo proryva. – M.: Ekonomika -2005. – 624s.
13. Stiglits Dzh. Globalizatsiya: trevozhnyie tendentsii / Per. s angl. G. G. Pirogova. M.: Natsionalnyy obschestvenno-nauchnyy fond, 2003. 304 s.
14. Systema ekonomichnoyi bezpeky derzhavy / Pid zah. red. Sukhorukova A.I. / Natsional'nyy instytut problem mizhnarodnoyi bezpeky pry RNBO Ukrayiny. – K.: VD "Stylos", 2009. – S. 194-204.
15. Kondratev N.D. Osnovnyie problemy ekonomicheskoy statiki i dinamiki. Predvaritelnyy eskiz. M.: Nauka, 1991. – S. 220-241.
16. Yakovets Yu.V. Epohalnyie innovatsii HHI veka / Yu.V. Yakovets; Mezhdunar. In-t P. Sorokina – N. Kondrateva. – M.: ZAO "Izdatelstvo "Ekonomika", 2004. – S. 318-333.
17. Polterovich V.M. Transplantatsiya ekonomicheskikh isstitutov / Ekonomicheskaya nauka sovremennoy Rossii, № 3, 2001. – S. 24-50.
18. Suhorukov A.I. Investuvannya ukraïns'koyi ekonomiky: Monohrafiya / Za red. A.I. Sukhorukova. – K.: Natsional'nyy instytut problem mizhnarodnoyi bezpeky, 2005. – S. 22-43
19. Saks Dzh., Vorner E. Ekonomicheskaya konvergentsiya i ekonomicheskaya politika // Voprosyi ekonomiki, 1995, № 5. – S. 13-38.
20. Kastels M. Informatsionnaya epoha: ekonomika, obschestvo i kultura / M. Kastels. – M.: GUVShE, 2000.

21. Raytner E. Kak bogatyie strany stali bogatymi, i pochemu bednyie ostayutsya bednymi / Per. s angl. N. Avtonomovoy, pod red. V. Avtonomova; Gos. un-t. – Vysshaya shkola ekonomiki. – M., 2011. – 384 s.
22. Chesbrough H. Open Innovation. The New Imperative for Creating and Profiting from Technology / H. Chesbrough, Boston, Massachusetts, Harvard Business School Publishing Corporation, 2003. – 226 p.; Chesbrough H. Open Business Models. How to Thrive in the New Innovation Landscape / H. Chesbrough, Boston, Massachusetts, Harvard Business School Publishing Corporation, 2006. – 224 p.
23. Karlson A. Shvedskiy eksperiment v demograficheskoy politike: Gunnar i Alva Myurdali i mezhoennyiy krizis narodonaseleniya / A. Karlson – M.: Myisl, 2009. – 312 s.
24. Spens M. Sleduyushchaya konvergenciya. Budushchee ekonomicheskogo rosta v mire, zhivushchem na raznyh skorostyah = The Next Convergence: The Future of Economic Growth in a Multispeed World. (2011). – M.: Izdatel'stvo Instituta Gajdara, 2012. – 336 s.
25. Tagarov B. Zh. Asimetriya informatsii na rynke kapitala i ee posledstviya / B. Zh. Tagarov // Izvestiya Irkutskoy gosudarstvennoy ekonomicheskoy akademii. – 2014. – № 1 (93). – S. 14-18.
26. Suhorukov A.I. Vpliv asimetrichnosti informatsii na ekonomichnu bezpeku derzhavi, її regioniv ta sub'ektiv gospodaryuvannya // V kn.: Stalij rozvitok – XXI stolittya: upravlinnya, tekhnologii, modeli. Diskusii 2017: kolektivna monografiya / Averihina T.V., Adamec' T.P., Anderson N.V. [ta in.]; NTUU "KPI". – Kiiv, 2017. – S. 115-127.
27. Valerica Cruceru. On contemporary warfare: short review of specific concepts // Revista Academiei For Ţelor Terestre. – 2014. – № 3. – P. 231-237.
28. Frank G. Hoffman. Conflict in the 21st century: The Rise of Hybrid Wars / Potomac Institute for Policy Studies. – Arlington, 2017. – P. 8. – http://www.potomacinstitute.org/publications/Potomac_Hybrid-War_0108.pdf.
29. Svltova glbrldna viyna: ukraiynskiy front: monografiya / za zag. red. V.P. Gorbullna. – Kiyiv: NISD, 2017. – 496 s.
30. Shevchenko A.V. Prioriteti ta instrumenti derzhavnoyi promislovoyi politiki u zabezpechenni vidnovlennya zrostannya realnogo sektora ekonomiki Ukraini / A.V. Shevchenko // Biznes Inform. – 2016. – № 1. S. 72-76.

Сухоруков А. Передумови безпечного розвитку соціально-економічних систем

Анотація. Розглянуто проблему гармонізації розвитку і безпеки соціально-економічних систем. Виявлено особливості формування соціально-економічних стратегій в умовах глобалізації та загроз транскордонних криз. Надано рекомендації щодо забезпечення коєволюційного балансу параметрів розвитку і безпеки соціально-економічних систем.

Ключові слова: соціально-економічна система, коєволюція параметрів, розвиток, економічна безпека.

Сухоруков А. Предпосылки безопасного развития социально-экономических систем

Аннотация. Рассмотрена проблема гармонизации развития и безопасности социально-экономических систем. Выявлены особенности формирования социально-экономических стратегий в условиях глобализации и угроз трансграничных кризисов. Предложены рекомендации по обеспечению коэволюционного баланса параметров развития и безопасности социально-экономических систем.

Ключевые слова: социально-экономическая система, коэволюция параметров, развитие, экономическая безопасность.