

“Research and methodological framework for managing the economic security of financial intermediaries in Ukraine”

AUTHORS	Nataliia Zachosova  https://orcid.org/0000-0001-8469-3681 Nataliia Babina  http://orcid.org/0000-0001-9777-4827 Volodymyr Zanora  http://orcid.org/0000-0003-1938-7981
ARTICLE INFO	Nataliia Zachosova, Nataliia Babina and Volodymyr Zanora (2018). Research and methodological framework for managing the economic security of financial intermediaries in Ukraine. <i>Banks and Bank Systems</i> , 13(4), 119-130. doi: 10.21511/bbs.13(4).2018.11
DOI	http://dx.doi.org/10.21511/bbs.13(4).2018.11
RELEASED ON	Friday, 21 December 2018
RECEIVED ON	Wednesday, 07 November 2018
ACCEPTED ON	Tuesday, 18 December 2018
LICENSE	 This work is licensed under a Creative Commons Attribution 4.0 International License
JOURNAL	"Banks and Bank Systems"
ISSN PRINT	1816-7403
ISSN ONLINE	1991-7074
PUBLISHER	LLC “Consulting Publishing Company “Business Perspectives”
FOUNDER	LLC “Consulting Publishing Company “Business Perspectives”



NUMBER OF REFERENCES

31



NUMBER OF FIGURES

3



NUMBER OF TABLES

4

© The author(s) 2025. This publication is an open access article.



BUSINESS PERSPECTIVES



LLC "CPC "Business Perspectives"
Hryhorii Skovoroda lane, 10, Sumy,
40022, Ukraine

www.businessperspectives.org

Received on: 7th of November, 2018
Accepted on: 18th of December, 2018

© Nataliia Zachosova, Nataliia Babina, Volodymyr Zanora, 2018

Nataliia Zachosova, Doctor of Economics, Associate Professor, Bohdan Khmelnytsky National University of Cherkasy, Ukraine.

Nataliia Babina, Ph.D. (Economics), Kyiv National University of Technologies and Design, Ukraine.

Volodymyr Zanora, Ph.D. (Economics), Bohdan Khmelnytsky National University of Cherkasy, Ukraine.



This is an Open Access article, distributed under the terms of the [Creative Commons Attribution 4.0 International license](https://creativecommons.org/licenses/by/4.0/), which permits unrestricted re-use, distribution, and reproduction in any medium, provided the original work is properly cited.

Nataliia Zachosova (Ukraine), Nataliia Babina (Ukraine), Volodymyr Zanora (Ukraine)

RESEARCH AND METHODOLOGICAL FRAMEWORK FOR MANAGING THE ECONOMIC SECURITY OF FINANCIAL INTERMEDIARIES IN UKRAINE

Abstract

The effective management of economic security of financial and banking institutions at the application level is not possible without formulating the conceptual foundations of this process in the research and methodological plane. With that, the management system should take into account the specifics of financial intermediaries, which requires the development of specific research and methodological approaches. The purpose of the study is to generalize the conceptual framework for economic security management of banking and parabanking financial institutions as an integral part of ensuring the economic security of the financial market and financial security of the state. The authors propose an algorithm for managing the system of economic security of banks and other financial institutions, and identify the features, advantages and disadvantages of models for providing economic security. It is proved that managing the economic security system should consider the type of an institution, its size, the adequate personnel availability, and financial, information and material support. Consequently, effective economic security management should ensure its high level, and, therefore, partially solve the problem of regulating banking security, the financial market security, and, as a consequence, the financial security of the country.

Keywords

bank, financial intermediaries, banking system, financial market, economic security, economic security management

JEL Classification

G20, G21, G28, O16

INTRODUCTION

The issue of effective economic security management, which is acute for banking and other financial institutions in Ukraine, cannot be solved rationally at the application level without shaping the conceptual framework for this process implementation in the research and methodological plane. The management of the economic security system as a separate management direction should not prevent banks and other financial intermediaries from fulfilling their key functions. This can only be achieved by integrating the process of ensuring economic security in the mechanisms of general management of these institutions.

At the macro level, the control over economic and financial security of banks will allow for regulating certain indicators of the level of bank security in the system of country's financial security. Thus, security-oriented management of professional participants in the financial market will stabilize financial security of the state in the long run. This gives national importance to the problems of laying the economic security management of banks and other financial institutions.

The concept of economic security management should be based on measures and instruments that will enable the financial interests of the financial and credit institutions to be realized without losing their financial stability, profitability and economic independence. This is an important prerequisite for ensuring the security of the functional components of the country's financial security. While managing the financial security system of financial intermediaries, it is necessary to take into account the specifics of their activities. Therefore, it is expedient to develop specific methodological approaches to managing economic security of different types of financial institutions.

1. LITERATURE REVIEW

A number of scientists have devoted their works to the management of economic and financial security at the macro level.

Athanasoulis et al. (1999) seek to establish a link between the state of macro-markets and financial security. Delaquil, Goldstein, Nelson, Peterson, Roe, Rose, Wei, and Wennberg (2012) combine problems in assessing the level of economic, energy and climate security and confirm the need for integrated protection of the state security in various areas. Hacker et al. (2014) develop the methodological aspects to assess the level of the country's economic security. The authors suggest using an Economic Security Index while diagnosing the economic security state. They also justify the possibility of its application as a new measurement tool for research and analysis of state policy on the one hand, and as a new means of assessing economic security of American workers and their families, on the other. Klein (2004) establishes the relationship between the level of economic security and the human well-being.

Among modern scholars, there are those who support the close relationship between the security and stability categories. Such an approach can be found in studies of the problems of the economic systems functioning and development. Thus, the Lithuanian scientists Wysokińska-Senkus and Raczkowski (2013) examine various aspects of economic security in the context of sustainable development. In the current study, publications focusing on financial security and financial stability of the state deserve special attention. It is worth paying attention to Keliuotytė-Staniulienė (2015), Perciun et al. (2014), and Semjonova (2016).

Baum et al. (2017) analyze financial security in the system of economic security of the state by study-

ing the problems of capital flows and financial stability. Korauš et al. (2016) address the problem of ensuring the banking component of the country's financial security. Kahler (2004) examines the theoretical framework for managing economic security at the macro level.

Managing the financial security of financial intermediaries has its own characteristics. The problems of conceptualizing the management of economic and financial security of banking institutions are raised by Ukrainian scientists. So, Rats (2016) specifies the peculiarities of fraud monitoring organization within the system of economic security management of the banking institution. Baryliuk (2017) offers a methodical approach to the formation of organizational and economic support for the financial security management of banks. Paulík et al. (2015) studied the application of the CSR measuring model in commercial banks in relation to their financial performance.

The analysis of world-renowned specialized economic and managerial publications for the last three years demonstrates the fragmentation of research related to the issues of regulating the security of the financial system and financial markets at the state level. In the context of this study, research by Daron, Ozdaglar, and Tahbaz-Salehi (2015) deserves to be explored. The authors distinguish factors negatively impacting the development of modern financial systems and making them less protected from all kinds of dangers and threats. Scientists have succeeded in proving that factors contributing to the financial system stability under certain conditions can be a significant source of systemic risk in another economic environment. Thus, state regulation is the tool that can maximize the positive impact of external and internal factors of their operational environment on the banks' economic security and minimize their negative

influence when the essential circumstances of the banking development change. Shive and Forster (2017), based on the practice of business structures in the US, emphasize that the positive effect of rational use of financial regulation tools can be extremely significant for modern banks and financial institutions. Therefore, according to Shive, Forster (2017), there is a tendency among financial companies to attract experienced experts to top management (from 2000 to 2015, the proportion of such specialists among American financial companies increased by 24%). Involvement of financial regulatory specialists positively influenced the organization of risk management processes, which in turn had the relevant results for the financial performance of American companies.

Chalmers (2015) describes the European experience of regulating certain types of financial services markets. It is believed that the global 2007–2009 financial crisis has caused so severe consequences for the financial systems of the countries due to weak and inappropriate state financial regulation, primarily of the banking system. Therefore, the search for ways to optimize the mechanisms of state regulation of banking and other financial services markets and their participants' activities is an actual research and applied problem, given the global economy instability and the formation of new crisis trends. Zhang et al. (2015) prove it is not possible to identify the moment of the crisis advent, to respond rationally to it and to overcome its consequences by timely management decisions using traditional methodological tools. Therefore, the regulatory impact on the financial market functioning and the state support of its professional participants at the time of the crisis deployment do not lose their significance. In addition to global economic crises, the innovations in the markets for financial products and services resulting from competition can form additional threats to the banks' economic security. With that in mind, mechanisms of state regulation of the banking system and its participants' activities need to be transformed, since traditional approaches to financial regulation are not suitable for controlling the financial innovation risks (Wieneke, 2016).

Edelmann and Hunt (2017) emphasize the importance of state regulation of the financial system and its banking segment in times of

economic instability. These authors concluded that “most regulatory areas aim to protect the financial system from a new wave of the crisis”. However, in order for their hypothesis to be fair and probable, it should be kept in mind that any managerial and other activities performed without proper knowledge and experience of implementation may not be an advantage but an additional threat to the entity's economic security. The ability to weigh risks, correctly evaluate them and make the appropriate decisions are important competencies for financial market participants. This idea was described by Black et al. (2018).

The activities of financial intermediaries are essential for the functioning of national, regional and global financial systems, as well as for ensuring sustainable economic development. At the same time, according to Capie (2015), the excessive regulatory intervention in the financial sector functioning, distrust of the population and other consumers of financial products may hinder economic growth. Therefore, it is very important to realize the need for balancing state regulation and self-regulation of security while ensuring the economic security of financial intermediaries.

2. METHODOLOGY

The works devoted to the main aspects of ensuring economic security at both micro and macro levels make the fundamental basis of the problem under study. The publications by domestic and foreign scientists in professional periodicals, legal acts, which formed the foundations of banking institutions functioning in Ukraine, make the information and analytical base of the research conducted. The statistical base for the article was prepared based on official websites and reports of the National Bank of Ukraine and the regulators of financial services markets.

To achieve the research objective, the following general and special scientific methods and tools were used: abstract and logical method and the method of theoretical analysis was used to determine the essence of managing the economic security of a financial institution; method of generali-

zation, system analysis, comparative analysis and abstraction have been applied to study the existing methodological approaches to the management of the economic security system of banking institutions; graphical method – to illustrate the intermediate and final results of the study; and the method of synthesis, concretization and analogy – to formulate conclusions and proposals.

The purpose of the study is to deepen the existing scientific and methodological approaches to managing the financial security of financial intermediaries in Ukraine.

3. RESULTS

The banking system and the financial market of Ukraine are currently in a state of imbalance, and the first attributes of stagnation are already evident in their separate segments. Table 1 presents quantitative indicators of the presence of professional financial intermediaries in the financial services markets over the past 10 years.

According to Table 1, there is a steady tendency to reduce the number of financial institutions, primarily banks, in the domestic financial market.

Table 1. Number of financial intermediaries in Ukraine in 2008–2017 (as at the end of the year)

Source: Compiled by authors according to the data from the National Bank of Ukraine, the National Commission for State Regulation of Financial Services Markets, and the Ukrainian Association of Investment Business.

Types of financial institutions	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Sparkline
Banks	184	182	176	176	176	180	163	117	96	82	
Insurance companies	469	450	456	442	414	407	382	361	310	294	
Credit unions	829	755	659	613	617	624	589	588	462	378	
Asset management companies	409	380	339	341	353	347	336	313	295	296	
Non-state pension funds	109	107	101	96	94	81	76	72	64	64	
Regulators of non-state pension funds	50	44	43	40	37	28	24	23	22	22	
Financial companies	132	208	221	251	312	377	415	571	650	818	
Leasing companies	208	209	199	217	243	254	267	268	202	183	
Pawnshops	314	373	426	456	473	479	477	482	456	415	
Collective investment schemes	888	985	1,095	1,125	1,222	1,250	1,188	1,147	1,131	1,160	

Only in the financial companies' segment and in the segment of collective investment, the growth of their professional participants is observed. The Ukrainian banking system was particularly sensitive to economic and political instability. Thus, in the last ten years, the number of banks has decreased by 55%. In 2017 alone, 14 institutions of the banking segment were declared bankrupt and liquidated. Since banking security is one of the six recognized components of the country's financial security, one considers it necessary to draw the attention of the National Bank of Ukraine experts to monitoring the level of economic security of those institutions that continue operating in the banking system. The withdrawal from the banking market of half of its participants has been a major financial burden for the Individual Deposit Guarantee Fund. Such dynamics may result in the public entities inability to fulfill their obligations to the population. This will further reduce the level of citizens' trust in the banking system and worsen financial inclusion indicators in the long run.

A similar situation is observed in the insurance market. For ten years, the number of insurers has decreased by 37%, in 2017, 16 companies abandoned the market. The market of credit unions decreased by more than half, by 54%, i.e. 84 institutions left the financial market during 2017. In the non-state pension funds (NPF) segment, the number reduced by 41%; the number of NPF regulators decreased by 56%, the number of asset management companies (AMCs) decreased by 28%, and leasing companies – by 12%. The number of pawnshops tended to decrease only two years ago: in 2016, 26 institutions and in 2017, 41 institutions abandoned the market.

Such quantitative dynamics of professional participants of the Ukrainian financial market in the ten-year retrospective evidences the problem with ensuring the proper level of their economic security. After all, those institutions abandon the market that cannot effectively counteract the negative external and internal threats and threats that accompany the functioning of domestic financial services markets. Timely identification of threats, their prevention, estimation of probable consequences for the volumes of financial institutions' assets and their clients, risk minimization, compensation of these risks negative consequences, search

for mechanisms of avoiding threats in the future – all these tasks are solved by an integrated system of economic security of the banking or any other financial institution. However, unlike risk management, which demonstrates similar goals, managing economic security as a process should seek to balance the cost of security measures and the investment required for the future development of a financial institution. Thus, the essential formula for managing the economic security is as follows: to protect – to ensure – to keep – to develop.

The awareness of the need to manage economic security among owners, top management and other bank stakeholders is currently at a low level. This is proved by the results of using empirical methods of scientific research. In the first quarter of 2018, an expert survey on economic security management in financial institutions of Ukraine was conducted. The results are in Figure 1. It should be noted that there were 100 experts who were the owners or representatives of top management of various types of financial institutions that have been operating in the financial services markets for more than three years. The additional diagram outlines the reasons for the absence of a mechanism for managing economic security in the financial institutions' management system.

Experts were asked to assess the level of functional development of a mechanism for managing the financial security of a financial institution whose stakeholders they are. 24% of experts recognized that there was no system of economic security in the financial institutions, and the process of counteracting the threats to their activities was formal and, at best, only declared on paper. This is a wake-up call, because the specifics and peculiarities of banks functioning, for example, when compared to other types of economic entities, are in their work with financial assets of individuals and legal entities who empower banking institutions to preserve and multiply their assets. The critical state of economic security of the banking institutions may result in the loss of these assets, which will provoke social tensions, lead to a decrease in the welfare of some citizens, slow down the indicators of business activity of economic entities, worsen the indicators of investment attractiveness and economic freedom of Ukraine in the international capital market, etc.

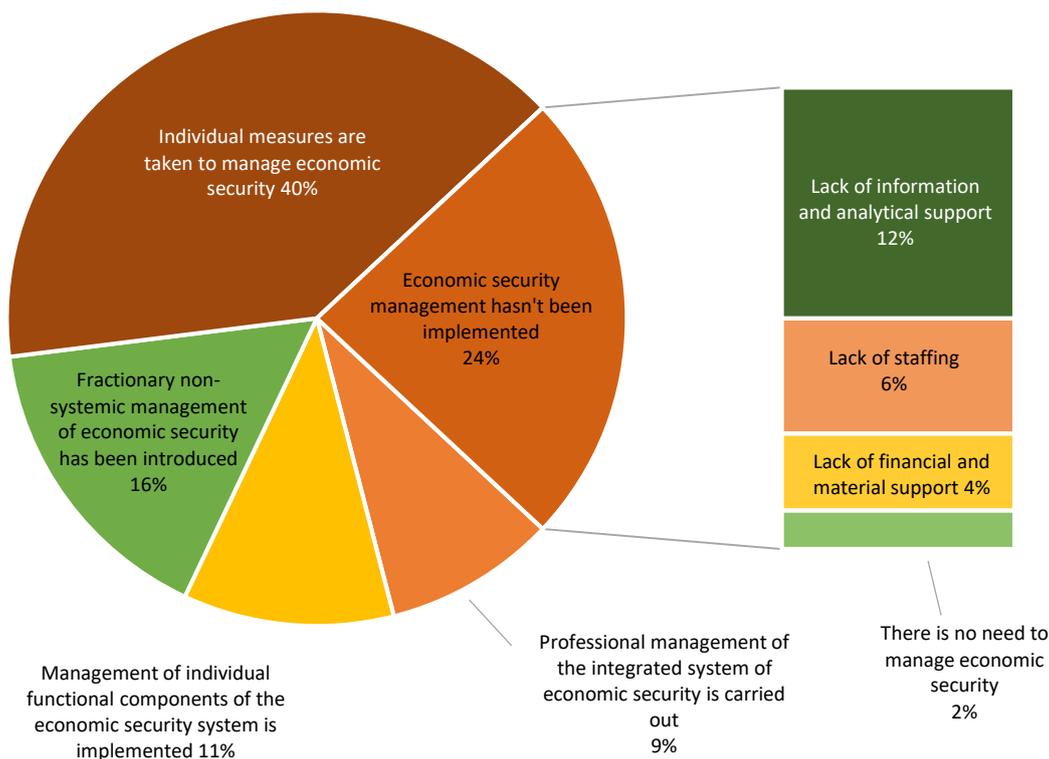


Figure 1. An expert survey results on the state of economic security management of financial intermediaries in Ukraine

The results of the expert survey actualize the problem of developing information and analytical support for managing the banks' economic security. The introduction of security-oriented management at the application level will stabilize the financial market, primarily by stopping the decrease in the number of its professional participants. At the end of the first half of 2018, 2,014 financial market participants were registered in the State Register of Financial Institutions. The number of banks in the Directory of operating banking institutions in this period was 82. According to the Ukrainian Association of Investment Business, the number of asset management companies amounted to 291 at the beginning of July 2018, and the number of non-state pension funds was 58 in this period. In addition, the investment segment of the Ukrainian financial market includes 1,226 collective investment institutions – mutual funds and corporate investment funds. Consequently, the domestic banking system and financial services markets remain functional, and their integration into the European financial area opens up new opportunities for financial institutions to develop. Therefore, nowadays, formulating the system

of economic security of banks and other financial intermediaries and introducing modern complex management mechanisms are an important nation-level task, since the level of banking security and financial security of the state largely depends on its financial services markets functionality.

Before making a conceptual framework for economic security management of professional participants in various segments of the financial market, it is necessary to understand the essence of this concept. Consequently, the control of economic security of financial institutions implies planning and organizing an integrated system of economic security, providing it with all necessary resources to fulfill its functions, and control of the level of economic security that has been achieved through such a system operation.

Conceptual principles of economic security management reveal the essence and components of economic security as a scientific category and type of practical activity. They are crucial to shape a methodology for ensuring economic security at both micro and macro levels. A high level of economic

security is the basis for banking and other financial institutions to outperform the planned profitability indicators and have the chance to win the competition with overseas, primarily European financial intermediaries, in order to realize the interests of financial services consumers. In addition, there is a need to develop a mechanism for managing the system of economic security for various types of financial institutions, taking their performance features into account. The results of the study make it possible to propose the research and methodological framework for economic security management of financial institutions (see Figure 2), which can be used for organizing the process of managing the economic security of modern banks.

The main point of using the priority of security approach during the financial institution activity is the fact that the management does not spare informational, financial, material, personnel and other resources for organization and support of effective functioning and qualitative evolution of the economic security system and ensuring its protection against various threats, the counteraction being the main element of financial expenses.

The residual funding of the financial intermediary's economic security system, unlike the previous approach, involves the allocation of the institution's assets not in favor of such a system. The priority is to make a profit. Financing prevention and counteraction of threats is possible only when their influence is obvious and large-scale negative consequences are inevitable.

The essence of the approach to ensuring the economic security system of financial institutions through the budgeting is most rational in the face of limited financial resources of domestic banks and other types of financial intermediaries, and in the period of aggravation of external environment threats to their activities, which is characteristic of the modern Ukrainian financial system and its banking segment. According to this approach, during cost planning, a financial institution forms a separate budget for implementing measures ensuring the realization of its financial interests and interests of its clients.

In practice, banks and other financial institutions can use the following approaches to economic se-

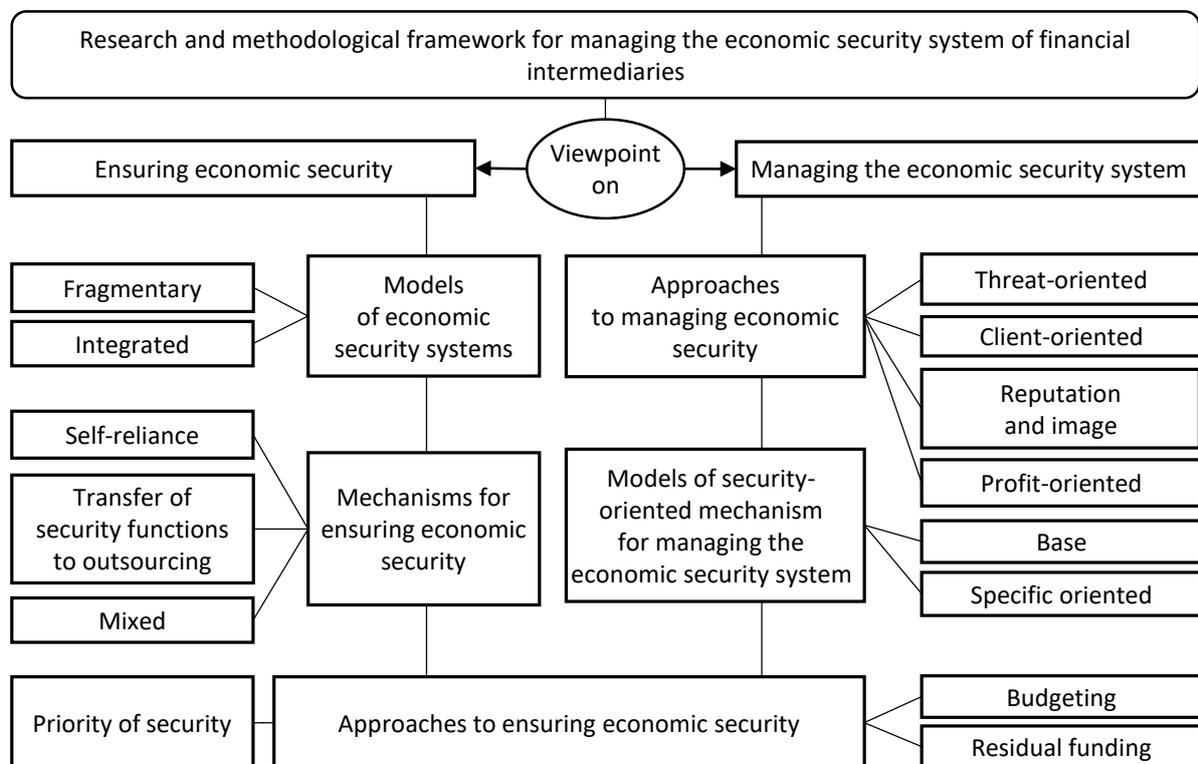


Figure 2. Research and methodological framework for managing the economic security of financial institutions

Table 2. Characteristics of models of economic security management of financial intermediaries

Source: Compiled by the authors.

Models	Specific features	Pros	Cons
Fragmentary model	The specific functional areas of security are determined and managed as needed; attention is given to the most risky operations, the clients' financial interests are not protected	Resource saving; targeting and accuracy towards security, timely response to threats	Some types of resources of a financial institution, its partners and clients are not adequately protected; the mechanism of interaction between the units for security protection is not apparent
Integrated model	The economic security system has an advanced complex structure; there are close links between its elements; protection mechanisms apply both to the resources of the institution and to the resources of its stakeholders	The force business area of the institution covers all the functional components of the economic security system	Ensuring security requires significant resources; system is difficult to manage; it is necessary to involve professionals for its effective management

curity management: the threat-oriented approach, in which the main goal of managing the economic security of financial intermediaries is avoiding threats or minimizing their potential negative consequences; the client-oriented approach, according to which the priority is to increase the number of clients, but only by attracting persons who can be considered reliable consumers of financial services, and an increase in the volume of assets of a financial institution from the capital they have received from them. This approach can be recommended for those types of financial institutions that are not profitable, such as credit unions; the profit-oriented approach aims at obtaining the maximum profit, taking into account the need to control the threatening factors of the internal and external environment only in the case of their direct and inevitable influence on profitability and financial results of the financial institution.

Nowadays, bank management can be offered to choose a reputation and image approach, the purpose of which is to achieve economic security as one of the competitive advantages. The disclosure

of information about this fact and the high level of transparency of the bank's activities are used as a means increasing the trust of clients, both existing and potential.

At present, two models of economic security are available for use by financial institutions (see Table 2).

It is advisable for banks to choose an integrated model to build their economic security system. Thus, an integrated model is suitable for use by large financial intermediaries, which implement a large number of financial products and services and possess numerous tools for managing their own economic security. A fragmentary model will be effective for security-oriented management of credit unions, investment companies and funds, small financial companies.

Table 3 demonstrates specific features of mechanisms for ensuring the economic security of financial intermediaries.

Depending on the type of financial intermediary, the mechanism for managing the economic secu-

Table 3. Features of ensuring the economic security of financial intermediaries

Source: Compiled by the authors.

Mechanism	Specific features	Pros	Cons
Self-reliance	The institution management entirely controls for the economic security, but significant resources are spent on the protective measures implementation	Protection from threats is permanent; the high level of interest of the persons responsible for the security in the long run; fast decision-making; minimum risk of information leakage	Low opportunities for countering threats; lack of specialists in managing the components of the economic security system; high level of subjectivity in the decisions implementation
Transfer of security functions to outsourcing	Professional approach to organizing and managing the system of economic security, but it is likely that the specifics of functioning will not be considered	Ability to save resources due to the no need to finance full-time positions; persons involved in ensuring the economic security have the necessary competencies	Protection from threats is not permanent; the risk of unscrupulous performer of ensuring economic security is increased
Mixed	It is a combination of the two mechanisms described	Combines the benefits of the two mechanisms	Minimizes the disadvantages of the two mechanisms

Table 4. The framework for shaping a mechanism for managing economic security of financial intermediaries, taking into account the specifics of their activities

Source: Compiled by the authors.

Types of financial intermediaries	The system model	Facilitating mechanism	Management approach	Approach to ensuring	Security regulation entity
Banks	Integrated	Mixed	Profit-oriented	Security priority	The National Bank of Ukraine
Investment companies		Self-reliance	Reputation and image	Budgeting	The National Commission for State Regulation of Financial services Markets/National Securities and Stock Market Commission
Insurance companies	Fragmentary/Integrated	Outsourcing	Threat-oriented		
Credit cooperation institutions	Fragmentary	Self-reliance	Client-oriented	Residual funding	The National Commission for State Regulation of Financial services Markets
Financial companies		Outsourcing	Profit-oriented	Budgeting	

rity system is developed and the approaches to its formation should be adapted to the specifics of its activities.

Within the scope of this study, the following framework for managing economic security for financial intermediaries is proposed (see Table 4).

In managing the economic security of banks and other types of financial institutions, two models of a management mechanism can be distinguished, namely the main (universal), security-oriented mechanism, and a specific oriented mechanism, which contains elements that are specific to certain types of financial intermediaries. Choosing between approaches or models for economic security management at the application level of a financial institution management will have an impact on its protection from external and internal threats, which, in its turn, should become one of the subjects of regulation in ensuring the financial security of the state (see Figure 3).

The developed algorithm as one of the stages of the regulator's activity to ensure adequate security of the banking system and financial services markets involves analysis of the economic security of their participants and control over its management. In the absence of the practice of economic security management in the institution, the regulator should include advisory work on the organization of such a system. In the case the violation is revealed, the regulator must take criminal measures to the management and owners of the financial institution.

Proposals formed based on the research activity have both scientific and practical value. In this research, the conceptual framework for managing the economic security of financial institutions as a component of financial security regulation on the country level has been theoretically formed. Four relevant approaches have made the basis for the concept of managing the economic security of a financial, primarily banking, institution. Two of them, namely client-oriented and income-oriented ones, were identified as traditional and those that need to be improved. The third and the fourth approaches – threat-oriented and reputation and image approaches – were offered as innovations in the system of economic security management of banking and other financial institutions.

Two suitable for use models of security-oriented mechanism for managing the economic security system have been formulated and described: the basic model, which should be used as a basis for banking institutions, and a specific model, which is adapted to the needs of ensuring the economic security of specific types of financial intermediaries.

Three variants of developing the mechanism for ensuring economic security of banks and other types of financial institutions are proposed. Each of these can be used by the top management in modern economic conditions depending on the potential available and resource possibilities. In general, a holistic concept for managing economic security of financial institutions has been developed, which can be integrated as an important

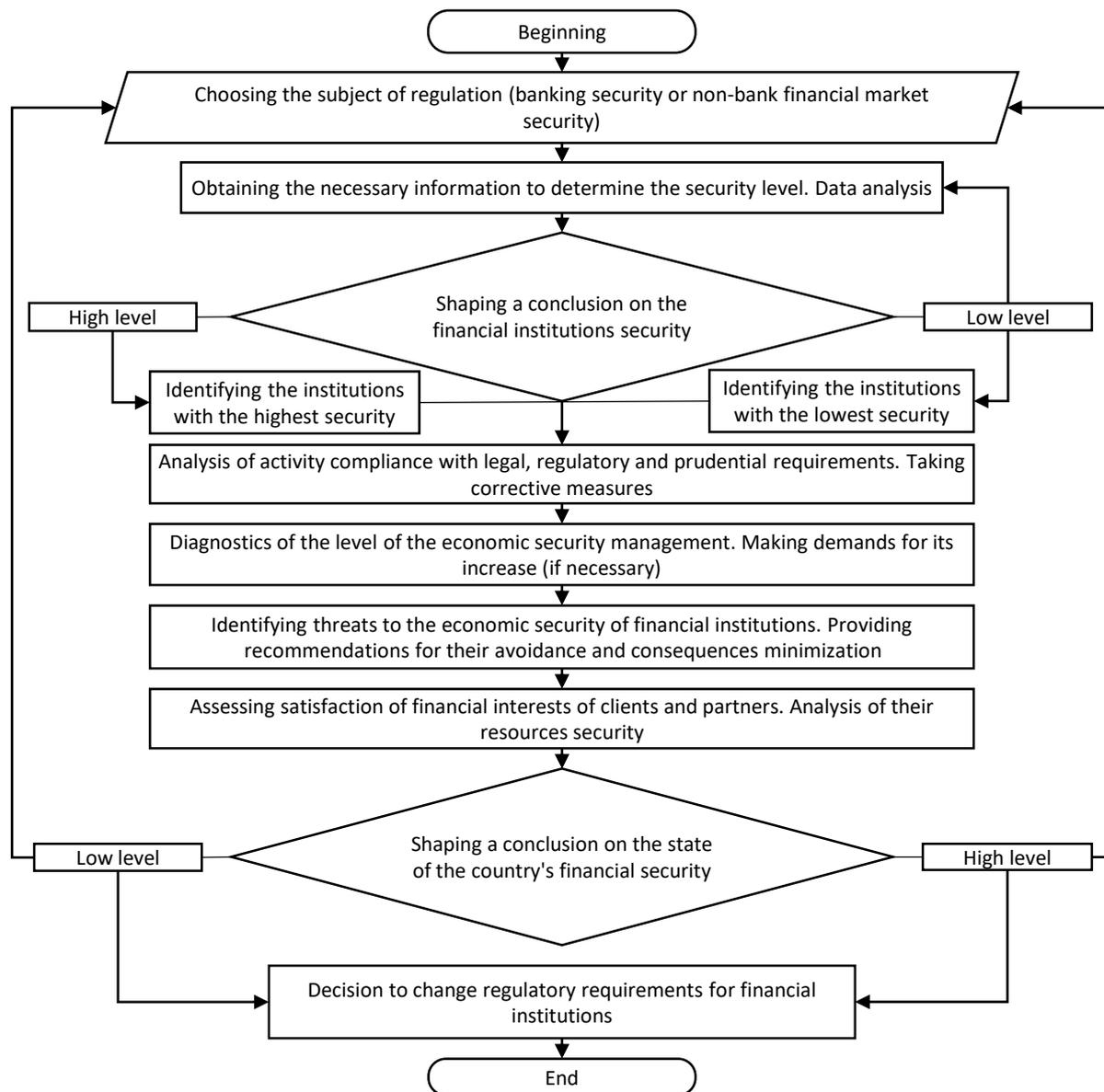


Figure 3. Position of managing the economic security of financial intermediaries in the system of ensuring the country's financial security

functional element into the overall financial intermediary management system. It can be used at the level of state regulation of the economic security of professional financial market participants in order to identify negative attributes in the mechanisms

used by management to protect their resources and clients while implementing financial interests of all their stakeholders on the way toward reaching the purpose of the creation and functioning of the financial institutions.

CONCLUSION

According to the study results, it is possible to provide recommendations on the development of research and methodological framework for managing the economic security system of financial intermediaries, which should be used as one of the elements of financial security regulation in Ukraine.

Managing economic security of financial institutions should be based on the type of the institution, its size, relevant personnel availability, financial, information and material resources. Managing security according to the principles, approaches and models will stabilize the domestic financial market. This is one of the tasks of regulating the financial security of the state in the near future.

Shaping a list of recommendations for the effective management of the state banks' economic security that are of strategic importance to Ukraine's banking security should be the next step of the study. Prospects for further research consist in the possibility of developing strategic benchmarks for the NBU's activities aimed at stabilizing the level of banking and, ultimately, financial security in Ukraine through the mechanisms for regulating the domestic banking sector development by controlling the level of economic security of individual banking institutions.

REFERENCES

- Acemoglu, D., Ozdaglar, A., & Tahbaz-Salehi, A. (2015). Systemic Risk and Stability in Financial Networks. *American Economic Review*, 105(2), 564-608. <https://doi.org/10.1257/aer.20130456>
- Athanasoulis, S., Shiller, R., & Van Wincoop, E. (1999). Macro Markets and Financial Security. *FRBNY Economic policy review*, 5(1), 21-39. Retrieved from <https://www.newyorkfed.org/medialibrary/media/research/ep/99v05n1/9904atha.pdf>
- Baldwin, A., Beres, Y., Duggan, G. B., Mont, M. C., Johnson, H., Middup, C., & Shiu, S. (2011). *Economic Methods and Decision Making by Security Professionals*. Retrieved from <https://research-portal.bath.ac.uk/en/publications/economic-methods-and-decision-making-by-security-professionals>
- Variluk, M. R. (2017). Методичний підхід до формування організаційно-економічного забезпечення управління фінансовою безпекою комерційного банку [Metodychnyi pidkhid do formuvannya orhanizatsiino-ekonomichnoho zabezpechennia upravlinnia finansovoiu bezpekoiu komertsiinoho banku]. *Biznes Inform*, 6, 191-200.
- Baum, C. F., Pundit, M., & Ramayandi, A. (2017). *Capital Flows and Financial Stability in Emerging Economies*. Asian Development Bank. (ADB Economics Working Paper Series No.522).
- Bistarellia, S., Fioravanti, F., Peretti, P., & Santini, F. (2012). Evaluation of Complex Security Scenarios using Defense Trees and Economic Indexes. *Journal of Experimental & Theoretical Artificial Intelligence*, 24(2), 161-192.
- Black, S. E., Devereux, P. J., Lundborg, P., & Majlesi, K. (2018). Learning to Take Risks? The Effect of Education on Risk-Taking in Financial Markets. *Review of Finance*, 22(3), 951-975. <https://doi.org/10.1093/rof/rfy005>
- Capie, F. (2016). Trust, Financial Regulation, and Growth. *Australian economic history review*, 56(1), 100-112. <https://doi.org/10.1111/aehr.12082>
- Chalmers, A. W. (2015). Financial industry mobilisation and securities markets regulation in Europe. *European Journal of Political Research*, 54(3), 482-501. <https://doi.org/10.1111/1475-6765.12099>
- D'yakonova, I., Nikitina, A., & Gurvits, N. (2018). Improvement of the Enterprise Economic Security Management in Global Environment. *Geopolitics under Globalization*, 2(1), 19-26. [https://doi.org/10.21511/gg.02\(1\).2018.03](https://doi.org/10.21511/gg.02(1).2018.03)
- Delaquil, P., Goldstein, G., Nelson, H., Peterson, T., Roe, S., Rose, A., Wei, D., & Wennberg, J. (2012). *Developing and Assessing Economic, Energy, and Climate Security and Investment Options for the US*. (2012 International Energy Workshop Paper). Center for Climate Strategies. Retrieved from https://www.decisionwaregroup.com/assets/ccs_strategic-investment-project_report.pdf
- Edelmann, C., & Hunt, P. (2017). How the Great Recession Changed Banking. *Harvard Business Review*. Retrieved from <https://hbr.org/2017/10/how-the-great-recession-changed-banking>.
- Hacker, J. S., Huber, G. A., Nichols, A., Rehm, P., Schlesinger, M., Valletta, R., & Craig, S. (2010). *The Economic Security Index. A New Measure of the Economic Security of American Workers their Families*. NY: Rockefeller Foundation. Retrieved from http://economicsecurityindex.org/assets/48pgplusCov_revised%20Aug%204.pdf
- Hacker, J. S., Huber, G. A., Nichols, A., Rehm, P., Schlesinger, M., Valletta, R., & Craig, S. (2014). The Economic Security Index: A New Measure for Research and Policy Analysis. *Special Issue: Economic Insecurity: Challenges, Issues and Findings*, 60(S1), 5-32. <https://doi.org/10.1111/roiw.12053>
- Kahler, M. (2004). Economic Security in an Era of Globalization: Definition and Provision. *Journal The Pacific Review*, 17(4), 485-502. <https://doi.org/10.1080/0951274042000326032>
- Keliuotyte-Staniulieniene, G. (2015). Fiscal Sustainability and its Impact on Financial Stability in Lithuania and other new Member

- States of the European Union. *Ekonomika*, 94(2), 28-46.
17. Klein, J. (2004). The Politics of Economic Security: Employee Benefits and the Privatization of New Deal Liberalism. *The Journal of Policy History*, 16(1), 34-65.
 18. Korauš, A., Dobrovič, J., Ključnikov, A., & Gombár, M. (2016). Consumer Approach to Bank Payment Card Security and Fraud. *Journal of security and sustainability*, 6(1), 85-102. [http://dx.doi.org/10.9770/jssi.2016.6.1\(6\)](http://dx.doi.org/10.9770/jssi.2016.6.1(6))
 19. Paulík, J., Sobeková Majková, M., Tykva, T., & Červinka, M. (2015). Application of the CSR Measuring Model in Commercial Bank in Relation to their Financial Performance. *Economics and Sociology*, 8(4), 65-81. <http://dx.doi.org/10.14254/2071-789X.2015/8-4/5>
 20. Perciun, R., Stratan, A., & Timush, A. (2014). The Methodology of Financial Stability Assessment of Republic of Moldova through Macroeconomic Indicators. *Procedia Economics and Finance*, 15, 383-392.
 21. Raczkowski, K., & Schneider, F. (2013). *The Economic Security of Business Transactions* (458 p.). Chartridge Books Oxford.
 22. Ratz, O. M. (2016). Дослідження особливостей організації фрод-моніторингу в системі управління економічною безпекою банку [Doslidzhennia osoblyvostei orhanizatsii frod-monitorynhu v systemi upravlinnia ekonomichnoiu bezpekoiu banku]. *Komunalne hospodarstvo mist*, 127, 33-38.
 23. Semjonova, N. (2016). Financial Security in the Baltic States: Comparison with Selected EU Countries. *Economics and Business*, 29, 90-95.
 24. Shive, S. A., & Forster, M. M. (2017). The Revolving Door for Financial Regulators. *Review of Finance*, 21(4), 1445-1484. <https://doi.org/10.1093/rof/rfw035>
 25. The National Bank of Ukraine. (2018). *Banking system indicators*. Retrieved from https://bank.gov.ua/control/uk/publish/article?art_id=34661442&cat_id=34798593
 26. The National Commission for State Regulation of Financial Services Markets. (2017). Річні звіти Нацкомфінпослуг [Richni zvity Natskomfinposluh]. Retrieved from <https://www.nfp.gov.ua/ua/Richni-zvity-Natskom-finposluh.html>
 27. The Ukrainian Association of Investment Business. (2018). *Key Figures*. Retrieved from <http://www.uaib.com.ua>
 28. Wieneke, A. (2016). Better Financial Innovation via Innovative Finance of Supervisors. *Economic Papers*, 35(1), 16-23. <https://doi.org/10.1111/1759-3441.12124>
 29. Woźniak, J., & Zaskórski, P. (2014). Security Management in the H-H Type of the Organizational Structures. *Information Systems in Management*, 3(1), 64-76.
 30. Wysokińska-Senkus, A., & Raczkowski, K. (2013). Economic Security in the Context of Sustainability. *Aleksandras Stulginskis University, Kaunas*, 6(1), 454-462.
 31. Zhang, Q., Vallascas, F., Keasey, K., & Cai, C. X. (2015). Are Market-Based Measures of Global Systemic Importance of Financial Institutions Useful to Regulators and Supervisors? *Journal of Money, Credit and Banking*, 47(7), 1403-1442. <https://doi.org/10.1111/jmcb.12249>