## JEL Classification G21

## FINANCIAL SECURITY OF THE BANK: MANAGEMENT AND INFLUENCE FACTORS

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**Summary.** The article considers the key aspects of ensuring financial security of a bank in the context of managing financial stability taking into account risks, as well as external and internal influence factors.

**Keywords:** financial security, economic security, risks, indicators of bank security, financial stability of a bank.

**Problem formulation.** One of the key issues of economic security of Ukraine is providing financial security. Its solution lies in increasing financial potential of the economy as a whole and business entities, households, in particular. Also, strengthening of financial security includes a balanced budget sphere, stability of the national currency, a financially stable banking system, the policy of domestic and foreign borrowing of the state, investment climate, etc. Therefore, the assessment of the efficiency of state administration necessarily involves an analysis of financial security state, regulation and development of both corrective and preventive measures to strengthen it.

Security of the banking sector is a part of financial security of a country, since the banking system is the most important component of financial and credit system of a country. Accordingly, the state of the banking sector has a significant impact on the level of both financial and economic security of Ukraine.

The activities of large groups of people, enterprises and the state depend on the functioning of the banking sector. Even economic groups that do not directly use the services of commercial banks, benefit indirectly, because a reliable banking system is one of the conditions for stabilizing the money circulation in a country. The dependence of banking activities on a variety of risks makes it necessary to form a sufficient amount of capital. To Аннотация. Рассмотрены ключевые аспекты обеспечения финансовой безопасности банка в контексте управления финансовой устойчивостью с учетом рисков, а также внешних и внутренних факторов влияния.

Ключевые слова: финансовая безопасность, экономическая безопасность, риски, индикаторы банковской безопасности, финансовая устойчивость банка.

determine the level of risk of a banking institution, it is necessary to determine the level of losses depending on the manifestation of risks recognized by the bank, which in turn requires an assessment of risks, including those ones that are not quantifiable. It is the bank's support for financial stability that allows maintaining a competitive position on the market. However, this task is rather complicated, since financial stability of a bank is influenced by macroeconomic and microeconomic factors as well as the socio-political situation, the economic condition of the market and the country as a whole, and the state of the internal stability of the bank.

Analysis of recent research and publications. In Ukrainian and foreign literature, substantial scientific developments are devoted to the issue of economic security, financial security, including bank security. It is worth noting scientific works by O. Baranovsky, O. Vasylchyshyn, N. Grebenyuk, T. Krupelnitska, V. Lyashenko, A. Sukhorukov, Y. Kharazishvili and others. The scientists' work and the relevance of the topic of the research serve as the basis for further study and exploration.

**The purpose of the article** is to develop approaches to identify the main factors influencing financial security of a bank in the context of maintaining its financial stability and risk management both in operational and strategic management. The system of a commercial bank financial stability management is a dialectical relationship between the process of planning, organization and control over the state of the capital, profitability, liquidity, assets and liabilities of the bank with simultaneous taking into account the level of risk, quality of management and staff motivation as an integral part of achieving the maximum efficiency of the banking activities based on the goals set. Due to the dynamic changes in the economy, the financial sector and on a global scale, financial security issues are constantly updated and diversified.

It is worth agreeing with G. Smokvina, that in works by most authors the issues of financial and economic security are considered separately: definitions of the essence of financial security are given, the categories of economic security are considered, the lists of individual threats and indicators of economic security are presented, some approaches to their classification are studied, some directions for their improvement are proposed [1].

Presentation of the main research material. Since financial security is an important component of economic security of a state, the analysis of its formative factors requires to continue the research in this context. As N. Kravchuk, O. Kolisnik, O. Melykh noted, financial security of a banking system is a state of the banking system, in which the conditions for its stable and efficient functioning, profit maximization and optimum use of its resources for the socio-economic development of the country are provided. Under such conditions, financial stability is maximally protected from targeted actions by a particular group of individuals and organizations or the financial situation that arises inside and outside the banking system. Financial security of a banking system is inextricably linked with financial security of a separate bank [2, p. 187–188].

Economic security is a state of the national economy, which allows it to remain resistant to internal and external threats, to provide high competitiveness in the global economic environment and characterizes the ability of the national economy to achieve sustainable and balanced growth [3].

The National Bank of Ukraine (NBU) defines financial stability as a financial system in which it is able to properly perform its core functions, such as financial intermediation and payments, as well as to counteract the crisis.

A financial system is considered to be stable if:

1) it effectively redistributes resources from the owners of savings to investors,

2) financial risks are carefully assessed and adequately managed, 3) the financial system is able to absorb shocks without significant negative consequences [4].

M. Khutorna believes that «...financial security is a broader concept than financial stability. As hierarchically subordinated concepts that are related as a cause (financial stability) and a consequence (financial security), they are characterized by a rather similar list of threats that are able to worsen their level» [5].

O. Baranovsky considers a threat to financial security of a commercial bank a set of conditions, processes, already existing and potentially possible phenomena and factors that impede the realization of the interests of the bank or create a danger to them [6, p. 184].

Threats to the security of a bank are formed from the outside and inside of it. External threats arise as a result of the influence of the environment around the bank, the activity of the state, unfavorable changes in the economic situation in the country and the world, the actions of competitors. Internal threats arise due to insufficient financial resources, ineffective structure of assets and liabilities, inappropriate actions of senior management of the bank, personnel, insecurity of information systems.

Financial security management of a bank is carried out in order to ensure financial stability of the bank at a level that allows it to have sufficient level of independence from external factors. Thus, a bank can't influence external threats. At the same time, an inadequate assessment may create internal security threats or worsen existing negative tendencies within the bank. The NBU recognizes the following interpretation of financial stability - it is a state of the bank characterized by a balance of financial flows, sufficient funds to maintain its solvency and liquidity, as well as cost-effective activities. Financial stability of a bank means permanent ability of the bank to meet its obligations and provide profitability at a level sufficient for normal functioning in a competitive environment [4].

The strategic goal of banks is to preserve and strengthen their positions in a financial market by maximizing and satisfying the needs of their clients and combining the interests of corporate clients and individuals to jointly achieve positive results in each one's activities. Accordingly, the priority activity directions of a bank to achieve this goal are expansion of the range of services offered; further development of lending operations of economic entities and individuals; development of commercial and commission operations with securities, deposit transactions, card transactions, cash transportation and collection, non-trading operations with foreign currency; strengthening the depositors' interests protection; minimization of risks in transactions; ensuring financial stability, liquidity and solvency of the bank.

A rather difficult situation in the market requires anti-crisis and relevant management methods, including financial stability management of the bank that involves weighed policy of preserving existing positions, including preserving the resource base and improving the quality of the loan portfolio, balanced policy of asset and liabilities of the bank. Particular attention should be paid to risk management policy in order to ensure "risk/ profitability" ratio sufficient for functioning of the bank while pursuing a conservative banking policy.

In general, the conceptual model of financial sustainability management system of a commercial bank can be presented in the form of interaction of factors that include management objects (capital, profit, liquidity, assets and liabilities), risks and limitations that are set by the NBU in the form of standards. At the same time, the target benchmarks for each object of management are set by shareholders in the framework of bank development strategy, which is a peculiar basis of the management system.

The experience of the global economic crisis and standards set by Basel III has made and is to

make serious changes to the model of financial stability management of a commercial bank [7]. As a result, banks will be required to gradually reduce their risk appetite, changes in attitude to assets value and collateral valuation, which are reflected in the volumes of lending to potential borrowers and according to the size of credit risk, which banks will be ready to accept. Herewith, banks gradually reorient themselves from investing in withdrawn financial instruments to financing enterprises in the real sector of economy and services.

With an increase in the passive base banks will focus more on long-term financing instruments. All this will increase the financial stability of banks in Ukraine. The effective development of banks will have a positive impact on the investment climate and economic growth. At the same time, the efficiency of banking activity depends considerably on the state of the economy (especially on the state of the manufacturing sector, since in times of crisis, the activity of banks is shifted towards speculative and risky banking operations).

According to normative documents of the NBU, risk management is a process with a help of which a bank reveals (identifies) risks, evaluates their values, monitors them and controls its risk positions, and also takes into account relationships between different categories (types) of risks (*Table 1*).

Table 1

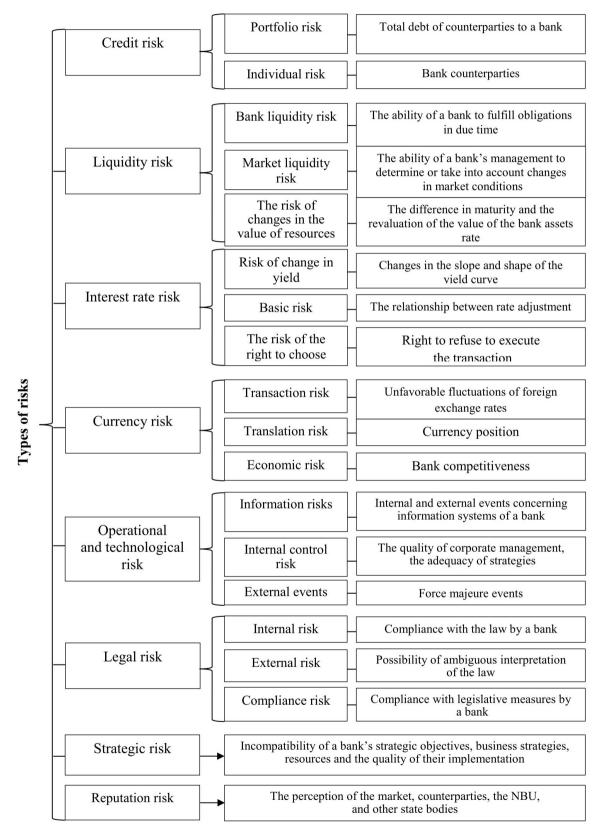
NBU normative document	Risk definition
Methodical recommendations on the organization and functioning of risk management systems in banks of Ukraine: NBU Board Resolution № 361, dated August 2, 2004 [8]	According to the National Bank of Ukraine, a risk is the probability that events, expected or unexpected, may have a negative impact on the capital and/or the inflow of a bank. According to a banking institution, a risk is a potential failure to receive income or reduce the market value of the bank's capital due to unfavorable effects of external or internal factors. Such losses can be direct (loss of income or capital) or indirect (imposing restrictions on the ability of an organization to achieve its business objectives).
Regulation on the organization of internal control in the banks of Ukraine: NBU Board Resolution № 867, dated December 29, 2014 [9]	A Risk is the probability that events, expected or unexpected, may have a negative impact on the capital and/or the inflow of a bank. The main types of risks are defined by regulatory acts of the National Bank of Ukraine.
Regulation on the organization of risk management system in Ukrainian banks and banking groups: NBU Board Resolution № 64, dated June 11, 2018 [10]	A risk is the probability of occurrence of losses or additional losses or lack of income, or non-fulfillment of contractual ob- ligations by a party due to the influence of negative internal and external factors.

Risk definition in the NBU normative documents

*The source:* [8—10].

A bank performs a comprehensive assessment of at least the following essential types of risks [10]: 1) credit risk; 2) liquidity risk; 3) interest rate risk of the banking book; 4) market risk; 5) operational risk; 6) compliance risk; 7) other significant types of risks that the bank is exposed to during its activities.

Also, a bank independently establishes factors, indicators and threshold of materiality of other types of risks based on substantiated conclusions and determines the procedure for identifying such risks in the method of identifying significant risks. The classification of the main types of risks and their meaningful differentiation are given in the form of a chart (*Chart 1*).



*Chart 1.* Classification of bank risks in accordance with normative documents of the NBU *The source:* [8—10].

Banking institutions face different types of risks that need to be identified quickly and it is necessary to take measures to reduce the negative effects of their exposure.

Therefore, it is expedient to manage risks systematically, having highlighted strategic, tactical and operational methods of impact. Forming the system of measures to neutralize bank risks, one must take into account the opportunities and threats of functioning of banks in the financial market, strengths and weaknesses, as well as features of the tasks of management of banking activities.

It is worth noting that the choice of a strategy for providing financial stability is closely linked to the ability to make right rational decisions. In the process of strategic planning of financial stability of a bank it is important to take into account the maximum number of options. An optimal strategy option should ensure the best balance between strengths and weaknesses, opportunities and threats to the environment. The main criterion for such assessment should be the relevance of the strategy and opportunities to take advantage of it, eliminate disadvantages, and minimize probable threats.

Since financial sustainability of a bank is hierarchically linked to financial stability and is an integral part of economic security, we consider it expedient to recommend using the system of the integral index of economic security in bank analytics. This will allow making more confident forecast and implement strategic and tactical planning of a lending institution. The integral index of economic security consists of nine weighted average subindices (components of economic security): 1) industrial security; 2) demographic security; 3) energy security; 4) foreign economic security; 5) investment and innovation security; 6) macroeconomic security; 7) food security; 8) social security; 9) financial security.

Financial security, in its turn, contains the following components: 1) banking security; 2) security of the non-bank financial market; 3) debt security; 4) budget security; 5) currency security; 6) monetary security.

The calculation of integral indices in the context of these subindices (components of economic security) is based on the assessment of more than 130 individual indicators, which are based both on statistical data and on data obtained through interviewing respondents.

It should be noted that weighted average subindices characterize individual phenomena. According to the author, weighted average subindices of banking security should be analyzed in combination with other subindices and their individual indicators. The conclusions from the proposed analysis may be important information, particularly for strategic forecasting and planning of financial stability of a bank and risk management.

Thus, banking security is characterized by appropriate subindices and indicators (*Table 2*).

Table 2

No.	Name of the indicator, unit	The procedure for calculating the indicator
1	The share of overdue loans in the total amount of loans granted by banks to Ukrainian residents, per cent	Overdue loan arrears, UAH million / loans granted, UAH million x 100
2	The ratio of bank loans and deposits in foreign currency, per cent	Loans granted to residents, UAH million / deposits attracted by deposit-taking corporations from residents, UAH million x 100
3	The share of foreign capital in the authorized capital of banks, per cent	The ratio of the amount of authorized capital owned by non-residents of Ukraine to the total amount of authorized capital of banks
4	The ratio of long-term (over 1 year) loans and deposits, times	The ratio of (loans granted to residents for a period of 1 to 5 years, UAH million + loans granted to residents for a period over 5 years, UAH million) to (deposits from residents for a period of 1 to 5 years, UAH million + deposits, borrowed from residents for a period over 5 years, UAH million)
5	Return on assets, per cent	The ratio of operating profit to assets
6	The ratio of liquid assets to short-term liabilities, per cent	The economic standards set by the National Bank of Ukraine to control the state of liquidity of banks: instant liquidity (H4), current liquidity (H5) and short-term liquidity (H6)

The economic content of indicators defining the subindex of banking security as a component of financial security of a state

Закінчення табл. 2

No	. Name of the indicator, unit	The procedure for calculating the indicator
7	The share of assets of the five largest banks in the aggregate assets of the banking system, per cent	Value of the five largest banks by size of assets, UAH million / assets of banks, total, UAH million

*The source:* [3; 4].

When carrying out a strategic analysis, one should assess the degree of influence on the present and potential level of financial sustainability of external and internal factors, and determine their particular impact on strategic planning. The need for research is determined by the fact that the environment is constantly undergoing change, and commercial banks are faced with the challenge of avoiding or minimizing potential threats and obstacles. The internal analysis should be focused on the study of the strengths and weaknesses of a banking institution, internal capabilities of influence on the process of strategic planning. This will allow determining the content of the problem, the purpose of the decision; identifying all factors, limitations and dependencies; collecting necessary data within the limits; carrying out data analysis; finding alternative solutions, evaluate them in terms of profitability; choosing the best solution.

Summarizing the above, it should be noted that the strategic management of financial stability of a commercial bank involves the development of strategies for dynamic development based on such a strategic set: financial sustainability methodology, crisis management system, financial security, risk management.

Thus, financial stability of a bank and risk management are important conditions for ensuring its financial security and, in its turn, financial security of the banking system as an integral part of economic security of a state.

Conclusions and perspectives of further research. Thus, financial stability of a bank is integrated into the system of financial security of the banking system of Ukraine and economic security of the state. Therefore, its management can be defined as a permanent increasing the values of financial and economic indicators in credit institutions, effective financial management by creating the necessary prerequisites for protecting them from external and internal threats. The given offers are effective and sufficiently universal, which allows them to be applied to all banking institutions of Ukraine at the present stage of economic development. However, taking into account the dynamic development of the financial market, it should be noted that the improvement of the above methods is the subject of further research.

## References

- 1. Smokvina, G. A. (2014). Finansova bezpeka yak strategichna skladova ekonomichnoi bezpeky Ukrainy [Financial security as a strategic component of Ukraine's economic security]. *Ekonomika promyslovosti ta orhanizatsii vyrobnytstva Economics of industry and production organization, 3* (13), 30–36 [in Ukrainian].
- 2. Kravchuk, N. Y., Kolisnyk, O. Y., & Melykh, O. Y. (2010). *Finansova bezpeka [Financial security]*. Ternopil: Vektor [in Ukrainian].
- 3. Metodychni rekomendatsii shchodo rozrakhunku rivnia ekonomichnoi bezpeky Ukrainy : Nakaz Ministerstva ekonomichnoho rozvytku i torhivli Ukrainy vid 29.10.2013 № 1277 [Methodical recommendations for calculating the level of economic security of Ukraine: Order of the Ministry of Economic Development and Trade of Ukraine dated October 29, 2013 № 1277]. *zakon.rada.gov.ua*. Retrieved from http://zakon.rada.gov.ua/rada/show/v1277731-13 [in Ukrainian].
- 4. Ofitsiinyi sait Natsionalnoho banku Ukrainy [The official website of the National Bank of Ukraine]. *www.bank.gov.ua*. Retrieved from http://www.bank.gov.ua [in Ukrainian].
- 5. Khutornaya, M. E. (2017). Teoretycheskaia vzaymosviaz poniatyi «fynansovaia ustoichyvost», «fynansovaia stabylnost» y «fynansovaia bezopasnost». Sovremennaia эkonomyka y obrazovanye: problemы, vozmozhnosty y perspektyvы razvytyia [Theoretical relationship between the notions of financial stability, financial stability and financial security. Modern Economics and Education: Problems, Opportunities and Prospects]. *Proceedings of the International Conference*. Almaty [in Russian].

- 6. Baranovsky, O. I. (2014). *Filosofiya bezpeky [The philosophy of security]*. Kyiv: Banking University of the NBU [in Ukrainian].
- 7. Vprovadzhennia novykh vymoh do kapitalu vidpovidno do norm Bazelia ta zakonodavstva YeS [Introducing new capital requirements in accordance with Basel and EU legislation]. Kyiv. *www.bank. gov.ua*. Retrieved from http://www.bank.gov.ua [in Ukrainian].
- 8. Pro skhvalennia Metodychnykh rekomendatsii shchodo orhanizatsii ta funktsionuvannia system ryzyk-menedzhmentu v bankakh Ukrainy: Postanova Pravlinnia NBU vid 02.08.2004 № 361 [Approval of Methodological Recommendations on the Organization and Functioning of Risk Management Systems in Banks of Ukraine: Resolution of the Board of the NBU dated 02.08.2004 № 361]. *zakon2.rada.gov.ua*. Retrieved from http://zakon2.rada.gov.ua/laws/show/v0361500-04.
- 9. Pro zatverdzhennia Polozhennia pro orhanizatsiiu vnutrishnoho kontroliu v bankakh Ukrainy: Postanova Pravlinnia NBU vid 29.12. 2014 № 867 [On Approval of the Regulation on the Organization of Internal Control in Banks of Ukraine: Resolution of the Board of the NBU dated 29.12. 2014 № 867]. *zakon2.rada.gov.ua*. Retrieved from http://zakon2.rada.gov.ua/laws/show/v0867500-14.
- 10. Pro zatverdzhennia Polozhennia pro orhanizatsiiu systemy upravlinnia ryzykamy v bankakh Ukrainy ta bankivskykh hrupakh: Postanova Pravlinnia NBU vid 11.06.2018 № 64 [About the approval of the Regulation on the organization of the risk management system in banks of Ukraine and banking groups: Resolution of the Board of the NBU dated June 11, 2018, № 64]. *zakon.rada.gov.ua*. Retrieved from http://zakon.rada.gov.ua/laws/show/v0064500-18.