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IDENTIFICATION OF THREATS TO THE FINANCIAL SECURITY OF BANKS

Об'єктом дослідження є внутрішні та зовнішні загрози фінансової безпеки банків України. Однією із найбільших проблем діяльності банківських установ є наявність загроз та їх ідентифікація і ранжування за ступенем важливості, значущості та впливу на фінансову безпеку.

В ході дослідження використовувались наступні методи: абстрактно-логічний, порівняльний аналіз, статистичний, монографічний, експертних оцінок, графічний, табличний, діалектичний. Для аналізу ризиків була запропонована система індикаторів, які формувались з урахуванням прийомів декомпозиції, аналізу та синтезу. При визначенні загроз для польового дослідження був застосований аналіз літературних джерел фахівців у сфері фінансової безпеки банків.

Дослідження були ґрунтовані на наступній гіпотезі: для комерційних банків, які відрізняються формою власності, структурою власного капіталу, групою, до якої входить банк, будуть домінувати різні загрози та небезпеки. Це потребує обов'язкового урахування під час оцінки рівня фінансової безпеки та розробки відповідних управлінських рішень і обґрунтування заходів з метою його підвищення.

Отриманий результат полягає у визначенні найбільш суттєвих загроз фінансової безпеки комерційного банку з погляду банківських фахівців – практиків. Це пов'язано з тим, що пріоритетизація загроз фінансової безпеки банків, визначення ступеню важливості та сили впливу дозволить сформулювати підґрунтя для вибору заходів раннього попередження та протидії. А також розробки альтернатив стратегічного і тактичного характеру для забезпечення належного рівня фінансової безпеки.

Запропоновано класифікацію загроз, яка враховує оцінки рівня значущості та важливості загроз банківськими працівниками різної кваліфікації та управлінського рівня. Запропонована класифікація загроз є універсальною для всіх банківських установ різних регіонів.

Ключові слова: фінансова безпека банку, загрози фінансової безпеки, внутрішні загрози, зовнішні загрози.

1. Introduction

The problem of ensuring a high level of financial security of banks is a pressing and urgent cause of high interdependence with both the state of the financial system of the country and the standard of living of each person. Investigating the problems of financial security of the bank, we conclude that the first priority is to study the threats and dangers. The concept of «security», «threat», «danger», «risk» is tightly interrelated, so revealing the content and essence of each other. In order to form a methodological basis for ensuring financial security, it is important not only to determine the theoretical aspects, but also to investigate the specifics of the practical activities of economic entities in various sectors and fields, including banking institutions.

The study of threats and hazards allows to identify key areas and objects that require protection, the introduction of preventive actions, tactical and strategic steps to improve the financial security of the bank. The importance and significance of the study of threats is presented in [1]. The author of this work notes that the restoration and maintenance of an adequate level of financial security of banks is possible only if the recovery of the system of detection, classification, localization of threats and risk management of banks in a changing external environment. In [2], the authors use the concept of «risk» and justify the urgent need to manage bank risks to ensure the se-

curity of a commercial bank. The process of identifying risks and developing measures to limit and minimize them is a prerequisite for ensuring the financial security of a banking institution. Researchers [3] note that modern participants in the banking sector and the insurance segment of the financial market have encountered such types of hazards, which have not been characteristic of the Ukrainian economy since its independence. In particular, it is possible to talk about military operations in the east of the country, a political crisis, an unprecedented social tension. Strengthened by globalization trends, these dangers are already having a devastating effect on the financial system of the state, and their consequences in the future are difficult to even imagine. Therefore, the topic of identifying threats to the security of financial institutions is again becoming topical [3].

Thus, the development and implementation of any decisions to improve and ensure a high level of financial security of the bank should be based on certain, ranked and conscious threats.

2. The object of research and its technological audit

The object of research is the internal and external threats to the financial security of Ukrainian banks. *The subject of research* is a set of theoretical and practical aspects of identifying threats to the financial security of banking

institutions. In the modern economic literature one can find different approaches to the definition of threats and their classification. The identification of threats and their thorough analysis must precede any business decision. One of the biggest business problems is the presence of threats, but they are difficult to measure.

So, improving approaches to identifying threats in banking institutions remain important and promising.

3. The aim and objectives of research

The aim of research is identification of threats to the financial security of banks and systematize them into a single classification, allowing the bank to make management decisions to identify them and minimize negative consequences.

To achieve this aim, the following tasks are formulated:

1. Determine the approaches to the classification of threats to financial security of banks – desk research.
2. Conduct field research by interviewing and questioning bank employees at the highest, middle, and operational levels to identify the most important threats to the financial security of commercial banks.

4. Research of existing solutions of the problem

In this paper let's pay attention to the study of the essence of the concepts of «threat», «danger», «risk». Let's only note that experts note the lack of consensus regarding the nature and relationship of these economic categories [4], the presence of different options for how one category becomes part of another [5]. Let's note that the danger precedes the threat, and the risk is the result of the impact or action of the threat.

In the literature, banking risks are classified according to various criteria. The hierarchy of risks according to the degree of their importance for one or another current moment is built up depending on the situation at the relevant moment in the state under the influence of both external and internal factors. Despite the large number of works of scientists in this direction, there is no unified approach to the classification of threats and risks to the security of banking institutions. So, the author of work [6] notes that in modern conditions such threats are most characteristic of the banking sector:

- poor quality of bank capital;
- pursuing a risky credit policy by banks;
- insufficient efficiency of banking supervision;
- insufficient coverage of deposits by the deposit insurance system;
- low liquidity of bank assets;
- low level of creditworthiness of enterprises in the real sector of the economy;
- the level of foreign investment in the banking sector.

And the same author adds that one of the main threats to the economic security of the banking sector is the banking crisis, which is defined as the period during which a substantial part of the banking system becomes illiquid and insolvent. And in the microeconomic problems of the banking sector, in the opinion of this researcher, the following should be included:

- excessive diversification and expansion of banks;
- too fast growth of obligations;

- poor quality of loans (excessive concentration, loans to related companies, inconsistency of the temporary structure of loans and liabilities, interest and currency risk, low level of loan repayment);
- poor planning.

But the feature of the work [7] is that the author shares threats not by type, but by source of origin.

The author of the work [8] classifies banking risks into financial risks, financial services risks or implementation risks (which corresponds to the essence of functional risks) and other external risks relative to the bank. In general, the authors of this work agree with this approach, does not contradict the approach of the National Bank of Ukraine (NBU).

The most substantive is the classification of banking risks proposed in [9], in which six main types of risks of a commercial bank and four additional types are identified. The most important advantage of this classification is that it includes both endogenous and exogenous banking risks that directly affect banking.

But such a classification cannot be used by commercial banks for practical use, since it is fairly grouped. And in the management process, a more detailed classification is often needed by identifying risk groups and subgroups, depending on the specifics of the operations conducted by the bank.

More successful, and one that most closely corresponds to the current state of Ukrainian banks, is the classification of risks according to research [10]. The advantage of this classification is that it distinguishes four categories of risk: financial, operational, business and emergency. In turn, they are divided into the appropriate types, the allocation of which is an important component in the risk management of each commercial bank, since improper management of them can lead to its unprofitable activity. The risks that Ukrainian banks face depend on the overall business strategy of the bank, its organizational structure, the functioning of internal systems, including computer and other technologies, and the coherence of the bank's policies. As well as measures to prevent fraud and mistakes in management. In addition, banks should consider the risks associated with the external environment of the banking business, including macroeconomic and political factors, legal conditions and regulatory regime. And also with a common financial sector infrastructure and payment system. At the moment, all types of risks are present in the Ukrainian banking system; if implemented, they can threaten the bank's activities as a whole or undermine its financial position and capital adequacy. Therefore, this classification rather accurately corresponds to the current state of Ukrainian banks and can be used in practical activities.

Analyzing the types of banking risks, it should be noted that this list will be complete if do not characterize the classification of risks in accordance with the Basel Capital Agreement, since Ukraine is taking measures to integrate the national banking system into the global financial space [11]:

- credit risk;
- market risk, including the interest risk of the trading book;
- share risk trading book;
- currency and commodity risks;
- operational risk.

According to the Basel II agreement, each bank must have a certain amount of capital to cover its main risks, namely, credit, market, operational. At the same time, each individual bank can develop its own classification of risks that it is exposed to in its work. It should be emphasized that in developing its own risk classification, the bank should take into account the risk classification defined by the NBU and, if necessary, expand the list of risks in order to improve their management practices.

Another of the classifications that can be used by banking institutions is the classification [12]. The advantage of this classification is the creation of a certain system of risks, which includes certain types, and the basis is the division of risks into external and internal. This, in turn, allows dividing risks into endogenous and exogenous (external and internal) risks. It is this distribution allows to develop effective methods of control and management capabilities.

Among economists, considerable attention is paid to the study of the risk classification of a commercial bank by the author of [13]. The most important elements underlying its classification are:

- type of a commercial bank;
- sphere of occurrence and influence of banking risk;
- composition of bank customers;
- risk calculation method;
- degree of banking risk;
- distribution of risk over time;
- nature of risk accounting;
- ability to manage bank risks;
- risk management tools.

Depending on each element, further risk classification is carried out.

Thus, the results of the analysis allow to conclude that there is no single classification of threats and risks to the security of banking institutions. Each individual bank can develop its own classification of risks that it is exposed to in its work. It should be emphasized that when developing a risk classification, each bank should take into account the risk classification defined by the National Bank of Ukraine and, if necessary, expand the list of risks in order to improve their management practices.

5. Methods of research

To achieve this aim, the following research methods are used:

- abstract-logical and comparative analysis – in disclosing the nature and characteristics of threats to banking activities in Ukraine;
- monographic method – for in-depth study of certain types of threats in banking institutions;
- expert assessments used in the development of field research to assess the risk of financial security of banking institutions;
- graphic and tabular methods used in the presentation of research results;
- dialectical method – for theoretical generalizations to identify problems and form conclusions.

When selecting the types of threats, literary sources of authorship of specialists in the banking sector are analyzed and applied to authoring developments.

The application of these author's approaches distinguishes the study among others.

6. Research results

The realities of the Ukrainian present in the field of banking are the internal inconsistency of the components of an integral system of banking security. Contradictory trends are generated by the action of objective and subjective factors. Their definition and the search for adequate measures to overcome it is extremely important for the formation of practical steps towards reform and tactics to ensure banking security [14].

It can be argued that leading researchers of our time constantly attempt to systematize and classify the threats that accompany the activities of Ukrainian financial institutions [3].

Most scientists explore two groups of threats – external and internal. The author of labor [14] notes that the security of a bank, as an organization, is related to the internal and external environment of its activities. External threats are actions by customers, partners, competitors, government agencies and citizens, as well as the criminal environment. In the internal environment, incompetent actions of the staff, the bank's administration and the heads of its departments in managing active-passive operations, banking operations, working with clients and information leaks may be the most threatening.

Ensuring the security of a bank is an important and difficult task in the context of the formation of a new development paradigm for the Ukrainian banking system. This is due to the influence of the external environment, which today is characterized by elements of post-crisis development and the formation of a new global financial architecture, and the internal environment, in particular, increased competition and consolidation of the banking business, lobbying the interests of specific business entities. The influence of the internal environment causes the emergence of threats that impede the process of implementing the strategic directions of development of banks in terms of profitability and minimization of risk [15].

In [16], the threats to the financial security of the banking system, which can be considered both external and internal for a particular banking institution, are investigated.

The author of [17] classifies threats to financial security:

- unlawful waste of funds by employees of banks;
- misappropriation of income;
- falsification of expenses;
- abuse of real assets of the bank or client;
- abuse of authority by management;
- forgery of documents or entering in them of inaccurate data;
- fraud in the field of accounting.

In turn, it refers to external [17]:

- internal and external political and economic stability;
- degree of dependence of the banking system on internal and external sources of financing;
- degree of concentration of banks' assets in various states or industries;
- ownership structure of banking institutions.

Internal threats include factors that are either directly generated by the bank, or are part of its internal environment. The main threats include the level of financial resources, the unsatisfactory structure of assets and liabilities, the incompetence of senior management and staff, and other factors directly related to the internal activities of a bank [18, 19].

Table 1

The threats presented in the questionnaire

External threats	Internal threats
Tax change (increase)	Disagreement of the founders
Change of laws	Staff actions
Change in the conditions of activity of banks (by the NBU)	Low competence of operational staff
Change in tender conditions	Low competence of management staff
Exchange rate change	Lack of strategy
Quotas (restrictions) of export/import	Low marketing
Activity restrictions	Withdrawal (insufficiency) of financial assets
Actions of executive authorities	Obsolete tools
Actions of power structures	Lack of inventory
Competitor actions	Income decreases
Actions of non-banking financial institutions	Costs are rising
Partner actions	Technology failure
Depositors actions	Low legal protection
Borrowers actions	Protection of information
Actions of «hackers» and kidnapers	Reduced competitiveness of services
Provision of benefits to individual firms	Loss of markets
Technology (techniques) development	–

External threats include factors that are the result of the influence of the external environment on the bank, in particular the activities of the state, the economic situation in the country and the world, competitors, etc. It is important to note that the influence of the external environment can be characterized as direct and indirect, controlled and uncontrollable, of a general and private nature, real and potential, purposeful and spontaneous [20]. Awareness of the diversity of the effects of the environment provides an accurate basis for analyzing external threats and hazards, the sources of their identification and the process of further management.

External threats arise outside the bank and are not related to its direct activities. The main subjects of external threats are competitors, customers, partners, friends and enemies, local and state institutions, bodies, organizations, institutions [19].

It is important to note that according to expert estimates, the most important external threats to the security of Ukrainian business entities are the state of the national currency, legislation, political regulation and violence [3]. It is advisable to pay special attention to the level of consumer confidence in banking products and services.

The analysis of literary sources shows that the issue of identifying key threats to the economic, including financial, security of the bank pays great attention. Numerous specialists investigate this problem from different angles – some come out of the big task of ensuring the financial security of the banking sector and the national economy, while others explore the bank as a separate subject of economic relations.

In order to analyze the threats that affect the financial security of banking institutions in the Kharkiv region (Ukraine), the authors proposed a questionnaire that contained a list of external and internal threats that affect the financial security of banks. The study was conducted in the autumn of 2018.

The questions presented in the formulated questionnaire relied on thorough research of the professional literature and practical experience of the authors. In compiling the questionnaire and determining the list of threats, the authors proceeded from the following prerequisites:

- 1) simple wording that would be understandable to numerous specialists in the banking sector and excluded a few interpretations;
- 2) inclusion in the list of threats, most often met during the theoretical study and were more justified by leading experts;
- 3) minimizing the manifestation of the position of the respondent (who in this study acts as an expert), his qualifications, professional erudition, and propensity for complex analysis.

Respondents were asked to familiarize themselves with the list of two groups of threats presented separately – external and internal. At their discretion, they assessed the degree of significance of threats by scoring from 1 to 10 according to the principle: 1 – the most important and significant threat, 10 – the least important.

The list of threats is presented in Table 1.

A total of 88 respondents were interviewed who are employees of 9 commercial banks that operate in the city of Kharkiv (Ukraine). Fig. 1 shows the distribution of respondents according to their place of work.

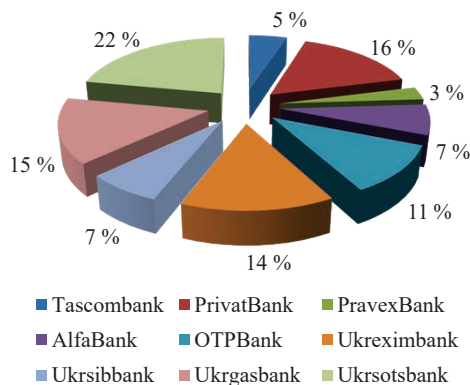


Fig. 1. Distribution of respondents according to the criteria of the bank in which they work

The largest group of respondents, which accounts for more than 22 % of all respondents, is employees of Ukrsofsbank.

Approximately the same number of respondents who took part in the study works in PrivatBank, Ukrainian Export-Import Bank, Ukrgasbank, respectively, in 15 % of respondents in each of these banks.

To ensure greater openness of respondents, questionnaires were anonymous. At the same time, one of the questionnaire questions is aimed at determining the role, position, position of the respondent. Fig. 2 presents the distribution of study participants by level of management.

92 % of respondents indicated the importance of such an external threat to the economic security of a commercial bank as «changing laws» (volatility, instability and

uncertainty of the legislative field of activity that took place against the background of the absence of an appointed NBU chairman) (Fig. 3).

The most frequently mentioned threats also included: the actions of competitors (more than 86 % of respondents indicated it); a change in the conditions of the banks, initiated by the NBU; actions of «hackers», investors, borrowers.

At the same time, the average score given by respondents from different banks to the same threats varies significantly. Thus, the most mentioned external threat «Change of Laws» by employees of PrivatBank, Ukreximbank, Ukrgasbank, Ukrsotsbank is estimated on average by 3 points – quite significant and weighty, it has a strong influence on the level of economic security of the bank (Fig. 3). This threat received the highest average score from Pravex specialists – 1 point. Specialists from the other four banks rated the threat of a change in laws by an average of 7 points.

Analyzing the internal threats that affect the financial security of banks, according to the results of the survey, it is possible to conclude that the most frequently mentioned threat (95.5 %) is «Competence of management personnel». This threat, according to respondents, is the most important among the others. «The actions of the staff» and «Competence of the operating personnel» are quite substantial and significant and have 88.6 % of the mentions.

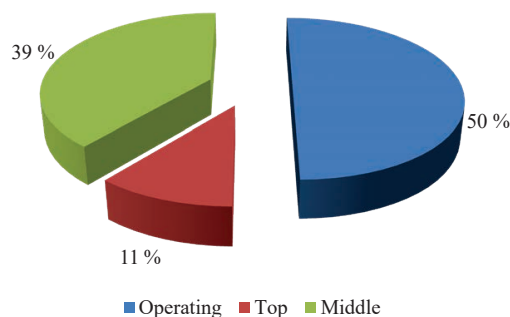


Fig. 2. Distribution of respondents by management level

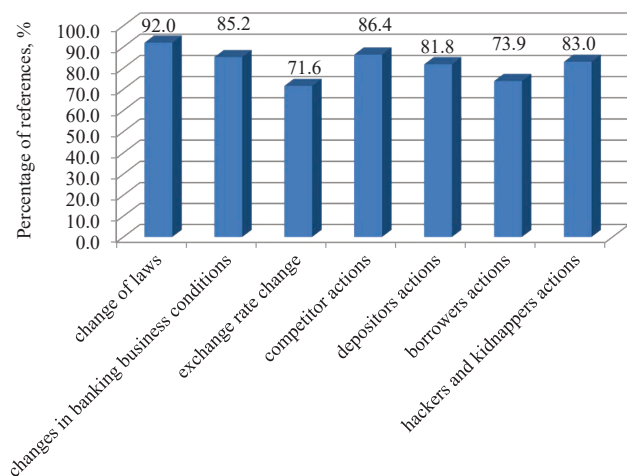


Fig. 3. External threats most frequently mentioned by respondents

The respondents distributed the same number of percentages between such threats as «Lack of strategy», «Withdrawal of funds» and «Information protection» (79.5 %, 78.4 % and 79.5 %, respectively). According to the respondents, the «Inconsistency of the founders' actions» (69.3 %) is insignificant. The structure of the impact of threats is illustrated in Fig. 4.

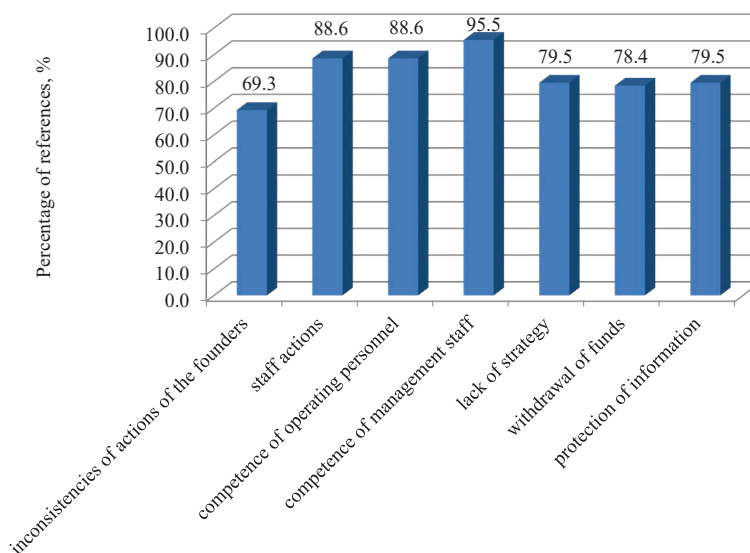


Fig. 4. Internal threats most frequently mentioned by respondents

It can be concluded that, depending on the different qualifications of a bank employee and the different levels of his management, the degree of significance of the threats affecting the financial security of banking institutions differs significantly.

The systematic nature of the totality of threats objectively requires an integrated, systematic approach to solving issues of ensuring the safety of banks.

7. SWOT analysis of research results

Strengths. The author's field research in banking institutions consists in the fact that, according to the level of management surveyed, it is possible to draw conclusions about the importance of threats affecting the financial security of banks.

Compared to other approaches, this can be done through an integrated approach to assessing all types of risks that have the greatest impact on the financial security of banking institutions.

Weaknesses. There are many methods for risk analysis. Most often used method of expert assessments, which has its drawbacks. According to the authors, it is necessary to use several different methods. Scoring the impact of certain types of threats requires re-checking.

Opportunities. This paper presents a version of the evaluation of respondents surveyed the impact of external and internal threats on the financial security of banking institutions. The list of internal and external threats are analyzed, the authors plan to further improve through the development of a rating scale of threat assessment.

Threats. Threat management in a banking institution includes the fact that the proposed threat assessment

is not an algorithm and it is impossible to avoid losses due to the influence of various threats. This is further complicated by the fact that not all threats can be pre-identified and minimized. The proposed classification of threats is universal for all banking institutions in different regions.

8. Conclusions

1. Approaches to the classification of threats to financial security of banks are defined. Studies have shown that external and internal threats largely affect the financial security of banking institutions. Since it is impossible to completely avoid threats, it is necessary to learn how to manage them. One of the main stages of threat management is their timely identification and identification. The author's approach to identifying external and internal threats in banking institutions is proposed.

2. Due to the conducted field research, the significance and importance of internal and external threats among bankers of various levels of management is evaluated. This makes it possible to carry out timely measures to prevent threats or minimize them and prevent negative effects on the financial security of banks.

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