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# ANALYSIS OF THE EFFECTIVENESS OF THE RISK MANAGEMENT SYSTEM IN COMMERCIAL BANKS

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Annotation. Banking systems in different countries of the world, as well as the sustainability and effectiveness of their development, are constantly under the control of international organizations, central banks of countries and the public. This universal interest is due to the activities of banks related to the accumulation of funds in them and placement on their behalf. Commercial banks are financial intermediaries and active business structures that are exposed to a variety of risks in carrying out their operations. Global economic crises, the complexity of the functioning of various economic systems have prompted the development of a risk-based approach to banking business. This led to the creation of internal risk management systems in organizations, and primarily in banks. The problem of systemic risk management in the banks of Kazakhstan is under constant attention from the National Bank of the Republic of Kazakhstan. This is due to the main development goals of the country aimed at creating a modern banking system and promoting sustainable and balanced economic development. The continuous improvement of banking operations in different countries of the world has led to the increased importance of banking supervision over banks and the development of alternative forms of control over the activities of banks, including in our country.

**Keywords:** risks, system efficiency, risk model, risk system assessment, commercial banks, financial system, financial policy.

In modern economic conditions, the functioning of the banking system of any country is associated with a large number of associated risks. It is impossible not to take into account their influence, since the results of the activities of credit institutions directly depend on them. Adequate risk management will reduce the negative consequences and maximize the results of the commercial bank's activities. At the present stage of risk management development, all the diversity of risks has been widely studied and covered in the scientific literature. Painstaking work is underway to develop methods for their assessment. However, it is worth noting that risk management issues are mainly solved by their individual types, within the framework of individual activities, without taking into account the interrelationships, which can be expressed both in an increase in total risk and a decrease, which should not be underestimated, as it can directly affect the financial results of the bank. Thereby ensuring the relevance of the problem of complex risk assessment and their impact on the financial performance of a credit institution, setting the management of the organization the task of implementing approaches



into the management and decision-making system, taking into account the complex assessment of associated risks, taking into account the risk/profitability ratio [1].

Main provisions of the article. To assess the effectiveness of the risk management system, banks need to be guided by international standards, best practices and documents of the National Bank of the Republic of Kazakhstan.

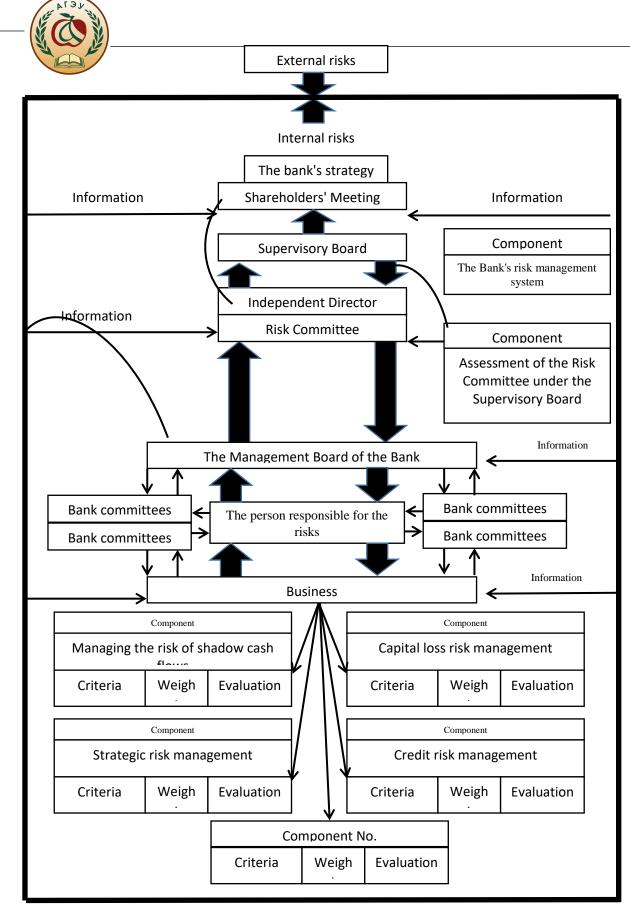
A scientific study of theoretical and methodological approaches and principles of the assessment of corporate management systems and risks existing in the world practice, their integration with the requirements of the legislation of the Republic of Kazakhstan to the bank's risk management systems determined the methodological basis of the author's model for assessing the effectiveness of the risk management system.

Introduction. In the context of the designated problem field, it is possible to define the main purpose of the study as the development of a model of the effectiveness of a risk management system, which consists of components and criteria included in the components. This model can be used to evaluate the bank's existing risk management systems [2]. A general integrated indicator of this assessment has been developed, which makes it possible to assess the effectiveness of the bank's current risk management system and outline ways to improve it. The first organization to develop an international standard in the field of capital measurement and risk assessment is the Basel Committee on Banking Supervision. His recommendations on capital adequacy, issued in 1988, became the basis for further improvement of the proposed methodology and the appearance of modern documents, on the basis of which banking systems using a risk-oriented approach to the activities of banks are currently being developed. The content and fundamental principles of the Basel Documents are considered in sufficient detail in the scientific economic literature and are reflected in the legal acts of the National Bank of the Republic of Kazakhstan, which adopted a number of regulatory documents that are mandatory for Kazakh banks when they create risk management systems in the course of their activities. Speaking about efficiency, it is necessary to take into account that the risk management system of any bank cannot be considered effective unless a vertical of functions at all levels of management and execution is built for its stable functioning, which can be represented in the form of a clear hierarchy from the supervisory board to the bank's employees [3].

**Methodology.** Methodological approaches to the management of complex financial risk based on the system of setting strategic limits in the areas of activity are considered. In the course of solving these problems, the authors relied on the results of theoretical and methodological approaches reflected in the works of scientists Penikas G.I., Shevchenko E.S., Fantazzini D., Solozhentsev E.D. Sharipov A.K., Baydybekova S.K. The main research methods were analysis, including statistical analysis and evaluation of random distributions, comparison, generalization, grouping, classification, optimization.

# Results.

The presented Model (Fig. 1) clearly shows the different levels of the risk management system in the corporate governance of the bank and consists of components included in this system. The components make it possible to evaluate the current risk system for its effectiveness in achieving the bank's strategic goals. The model takes into account information flows affecting the bank's risks based on the external and internal environment, includes different levels of interrelationships of structural elements included in the bank's risk management system.



**Figure 1.** - A model for evaluating the effectiveness of a risk management system. Note: compiled by the authors.



It determines the dependencies of the structural elements with the developed components, reflecting the specific relationships that form a single cycle of management of the bank's risk system. The use of structural analysis made it possible to establish meaningful components of the Model filled with specific managerial meaning and criteria for their evaluation. Each component of the Model includes a list of criteria developed by the bank independently, taking into account the bank's development strategy and its risk appetite. Each qualitative or quantitative evaluation criterion included in the components of the Model is evaluated by a point method on a scale from 1 to 4 points, where 1 point is the highest score and 4 is the lowest. The score is formed based on the criteria presented in Table 1.

Table 1. - Model Evaluation Criteria.

No॒	Characteristics of the criterion
1	Yes (regularly, in accordance with local regulations, in full)
2	With a few exceptions (usually quite complete)
3	Partially (in some cases, not fully enough)
4	No (never, not provided for by local regulations)

Note: compiled by the authors.

The model consists of a system of components that include various evaluation criteria, the main and mandatory of them is the component covering the risk management system and the level of its penetration into business processes.

Another methodological aspect that needs to be taken into account when developing the components of the Model is the requirements for banks to create corporate management systems. In the Banking Code of the Republic of Kazakhstan, corporate governance of the bank is understood as a system of interaction between shareholders, management bodies, control bodies, bank officials and other interested parties aimed at the overall management of the bank's activities [4]. The Supervisory Board of the bank ensures the organization of corporate governance and risk management systems. In international practice, the supervisory boards of banks check the effectiveness of corporate management systems both independently and with the help of audit organizations, focusing on the recommendations of the International Finance Corporation. The recommendations of this international financial institution, which is part of the structure of the World Bank, are used by most countries of the world, therefore it seems appropriate to include in the Model a component related to the effectiveness of the work of the risk committee under the supervisory Board of the bank. This committee is a structural element of the corporate management system, and one of its main tasks is to ensure highquality preparation of decisions of the supervisory Board on issues related to the bank's risk management. The effectiveness of the work of the Supervisory board in the organization of the bank's risk management system depends on the activities of the risk committee under the Supervisory Board.

In the future, when banks of the Republic of Kazakhstan conduct self-assessment of the activities of supervisory boards and committees established under them, these criteria can be used as the basis for the development of a separate methodology for self-assessment of the risk committee under the Supervisory Board of the bank. The components of the Model that make up the management system for certain types of risks determined by the bank are based on the requirements of the National Bank, the principles of the Basel Committee on Supervision, obliging the bank to identify the main risks arising in the course of its activities, the sources of their occurrence and to manage its inherent risks. The main types of banking risks

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that need to be included as separate components are credit, country, market risks, interest rate risk of the bank portfolio, liquidity risk, operational and strategic risks, and risk of loss of the bank's business reputation (reputational risk) and concentration risk [5].

Since banks define the list of inherent risks in their risk strategy and policy, it can be expanded by them independently. According to the authors, the above list of risks should be expanded by including the risk of capital loss and the risk of shadow cash flows. These are significant risks that require attention not only from the management board of the bank, but also from its owners. And since the bank's risk strategy and policy are considered by the supervisory boards of banks as the highest collegial management bodies, the management of these risks, along with others, will be under the close attention of the bank's owners.

The risk of capital loss by the bank at this stage of the development of the economy of our country requires special attention of top managers and owners of the bank. Only for 2020 the change in the dollar/euro exchange rate as an external factor affecting the amount of the bank's capital led to a 25% depreciation of the capital.

The risk management process includes eight interrelated elements that are components of one whole: internal environment, setting goals, defining events, risk assessment, risk response, controls, information and communication, monitoring. In the SOSO model, risk management is a complex, cyclical process in which all elements affect each other. Since the banks of the Republic of Kazakhstan are at the same time organizations, joint-stock companies, in relation to the banking system, this approach, according to the authors, can be clarifying and complementary in the development of components and criteria for the effectiveness of the risk management system.

For example, when criteria are included in the component of assessing individual types of risk, it is necessary to assess the management processes of each type of risk separately and an overall assessment based on the above elements. This will make it possible to determine the interrelationships and the depth of penetration into the bank's structure of risk management procedures and the relationship with the internal control service. Evaluation of the effectiveness of any management system, including the bank, is directly related to understanding the internal content of each business process and information channels within the bank. When developing the components of the model, it is necessary to take into account the strategic goals of the bank related to its mission, which is reflected in its development strategy. The bank's strategy for a specific period includes a set of performance indicators of the bank. The most important indicators should be reflected in the quantitative criteria included in the components related to the financial performance of the bank and the level of acceptable risks to achieve them [6].

The main performance indicators are traditionally associated with the return on assets, equity, and the value of shares. But they should be expanded and included in the components, selecting the most significant ones for the bank. This will allow for a better assessment of the effectiveness of the risk management system. The model, when used by banks, makes it possible to determine a set of components taking into account the risks inherent in the bank and to develop evaluation criteria. The point-weight assessment makes it possible to evaluate each criterion included in the component and the component of the risk management system itself. This allows, in turn, assessing the effectiveness of the bank's risk management system.

**Conclusions.** Thus, when developing methodological approaches to building /forming a Model for assessing the effectiveness of the bank's risk management system, the recommendations of the Basel Committee regarding the organization of banking supervision and risk management were used, which are reflected in the legislative acts of the National Bank of the



Republic of Kazakhstan regulating the risk-oriented approach of banking business. The SOSO methodology was also used, which is a synthesis of existing approaches to risk management and analysis of risk situations, providing an integrated approach to the structure of building a common risk management system. These approaches are integrated with international requirements for corporate bank management systems and requirements for the creation of these systems. They allowed the authors to present a model that takes into account the following:

- information flows affecting the bank's risks, based on the external and internal environment:
- different levels of interrelationships of structural elements included in the bank's risk management system;
  - dependencies of structural elements with the developed components.

The model reflects a single cycle of management of the bank's risk system. It includes a set of the following components:

- the bank's risk management system;
- assessment of the risk committee under the Supervisory Board of the bank;
- Strategic risk management;
- credit risk management;
- Liquidity risk management;
- bank portfolio interest rate risk management;
- Country risk management;
- Operational risk management;
- managing the risk of loss of business reputation;
- market risk management (by type);
- capital loss risk management;
- Managing the risk of shadow cash flows.

The point-and-weight evaluation of the criteria included in the components allows calculating the indicator for assessing the quality of management of each component separately and the overall integrated indicator for evaluating the effectiveness of the bank's risk management system. During the development and implementation of the Model in a particular bank, more than 160 criteria were used, united by 12 components of the model, which allowed the bank to assess the effectiveness of the bank's risk management system, calculate a common integrated indicator and an indicator for each component of the risk management system. In turn, this made it possible to identify areas of loss of control over risks, assess the adequacy of the risk management system to the nature and volume of transactions, develop recommendations for improving the current system and planning the bank's budget. The component of the Model "Assessment of the Risk Committee under the Supervisory Board of the bank" can be used in the future for self-assessment of the activities of the committee carried out by banks in assessing the corporate management system.

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# КОММЕРЦИЯЛЫҚ БАНКТЕРДЕГІ ТӘУЕКЕЛДЕРДІ БАСҚАРУ ЖҮЙЕСІНІҢ ТИІМДІЛІГІН ТАЛДАУ

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Түйін. Мақалада теориялық-әдіснамалық аспектілер, қаржылық тәуекелдерді кешенді бағалау және басқару әдістері және оларды банкті стратегиялық басқару жүйесіне енгізу қарастырылады. Зерттеу шеңберінде авторлар қаржылық тәуекелдерді жеке-жеке және олардың кешенінде бағалаудың негізгі әдістерін талдау және жүйелеу бойынша міндеттерді айқындап, шешті. Пайда мен шығындар шотының жекелеген элементтерінің өзара байланысына және олардың банк қызметінің қорытынды қаржылық нәтижесіне әсеріне негізделген қаржылық тәуекелдерді кешенді бағалау моделі ұсынылды. Қызмет бағыттары бойынша стратегиялық лимиттерді белгілеу жүйесіне негізделген кешенді қаржылық тәуекелдерді басқарудың әдістемелік тәсілдері қаралды.

**Түйін сөздер:** тәуекелдер, жүйенің тиімділігі, тәуекелдер моделі, тәуекелдер жүйесін бағалау, коммерциялық банктер, қаржы жүйесі, қаржы саясаты.

# АНАЛИЗ ЭФФЕКТИВНОСТИ СИСТЕМЫ УПРАВЛЕНИЯ РИСКАМИ В КОМ-МЕРЧЕСКИХ БАНКАХ

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**Резюме.** В статье рассматривается теоретико-методологические аспекты методики комплексной оценки и управления финансовыми рисками и их имплементация в систему стратегического управления банком. В рамках исследования авторами были определены и решены задачи по анализу и систематизации основных методов оценки финансовых рисков в отдельности и их комплексе. Предложена модель комплексной оценки финансовых рисков, основанной на взаимосвязи отдельных элементов счета прибылей и убытков и их влияния на итоговый финансовый результат деятельности банка. Рассмотрены методические подходы к управлению комплексным финансовым



риском, основанной на системе установления стратегических лимитов по направлениям деятельности.

**Ключевые слова:** риски, эффективность системы, модель рисков, оценка системы рисков, коммерческие банки, финансовая система, финансовая политика.

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