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**«Directions for updating the construction project preparation system and
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Ensuring the economic security of financial institutions is becoming increasingly important in the face of economic imbalances, in particular due to the pandemic. For the country's stable development, the activities of financial institutions must be based on the principle of security. The safe operation of institutions is the key to their competitiveness and reliability in the financial sector, as it minimizes risks and threats. The use of effective tools and methods for analyzing all aspects of institutions' activities allows for timely detection of threats and adjustment of strategies to ensure economic security.

The issues of economic security of financial and credit institutions are the subject of scientific works of such leading Ukrainian scientists as O. Baranovskyi, N. Babina, S. Vasylchak, N. Vnukova, N. Havlovska, O. Hrytsenko, V. Dombrovskyi, S. Yegorycheva, S. Zhuravka, O. Zhuravka, Zachosova N.V., Kovalenko V.V., Kolodizev O.M., Kopytko M.I., Kyrychenko O.A., Krupka I.M., Melnyk S.I., Nahaychuk N.G., Nedilska L.V, Onishchenko V.O., Rudnichenko E.M., Snishchenko R.G., Svystun L.A., Khudolii Y.S., Iksanovska N.A., Staier O.M., Yavorska T.V., Yaremenko S.M. and others.

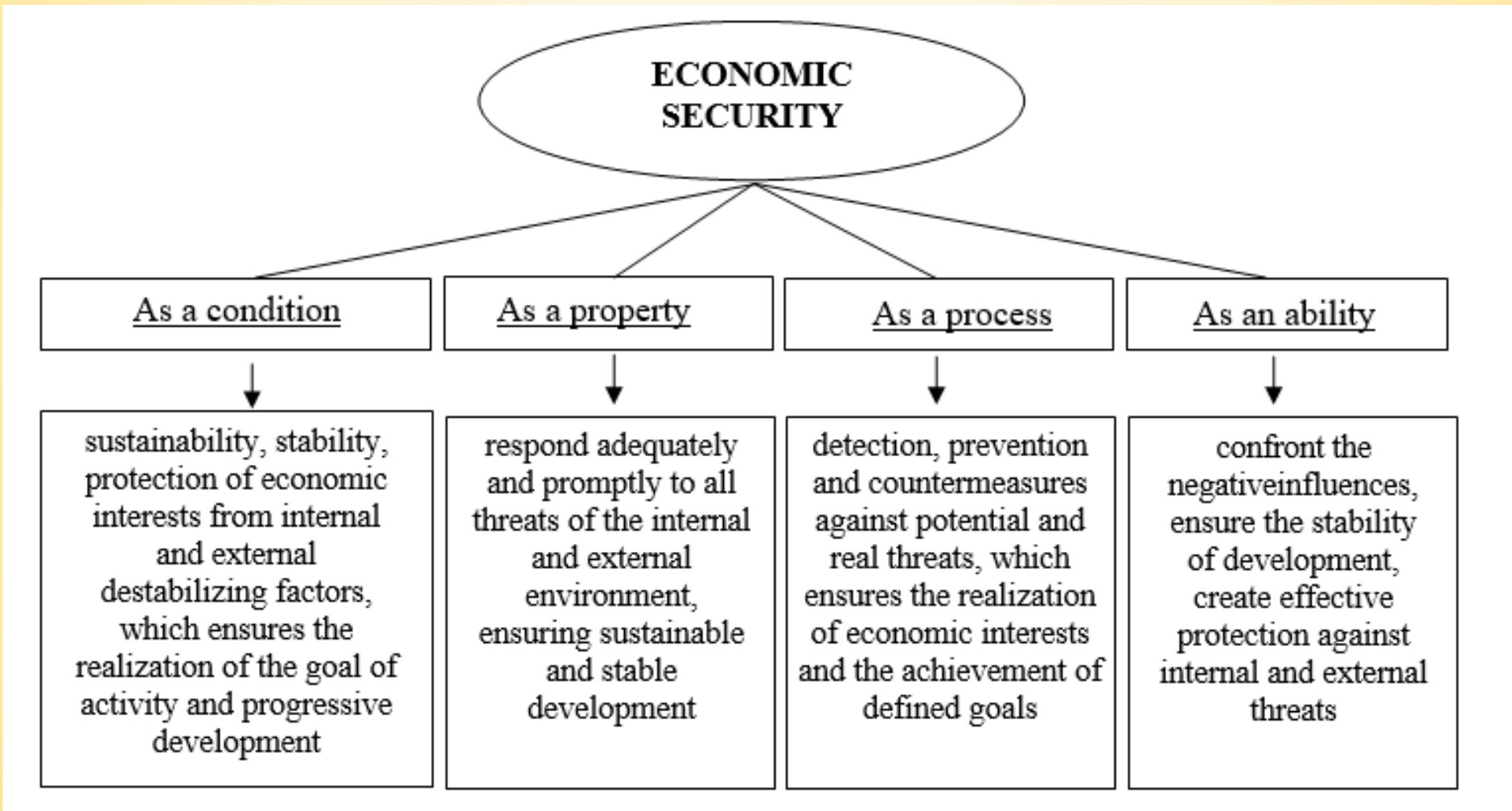
To ensure the sustainability of the national economy, it is important to maintain an adequate level of economic security of all economic entities, including financial institutions, which are important links in the transformation of capital and investment in the country. At the same time, economic security implies both stable development and the ability to withstand internal and external threats.

Theoretical approaches to defining economic security: There are different approaches to the interpretation of economic security in the scientific literature, in particular through the concept of financial security or financial and economic security, which contains a broader interpretation and covers not only financial aspects but also social, technological, informational and other factors.

The key elements of economic security of financial institutions include:

- ***Efficient use of financial resources.***
- ***Protection of the interests of owners, managers, customers, and staff.***
- ***Ability to withstand threats such as fraud, raiding, and economic crises.***
- ***Ensuring stable development and competitiveness.***

Therefore, it is worth noting that there are several aspects of the interpretation of the concept of “economic security of a financial institution”, which, in our opinion, do not contradict but complement each other



Methodological approaches to the economic security of the FCU:

Resource approach: Focuses on the sufficiency and efficiency of resources for the functioning of the FCU (financial, material, human resources, etc.). The authors point out its limitations, as it does not cover all aspects of security.

Resilience approach: Assesses the ability of the FCU to counteract threats and ensure sustainable development even in crisis situations.

Process approach: Defines economic security as a set of actions to ensure and maintain it.

Competitive approach: Focuses on ensuring competitive advantages in the business environment.

Defensive approach: Focuses on protecting the economic interests of the FCU from threats from the internal and external environment.

Developmental approach: Economic security is considered as a basis for sustainable development of the FCU.

Components of economic security of the FCU: Based on different views of scholars, the following components are distinguished:

Financial: Management of financial resources, financial stability.

Information: Includes cybersecurity, privacy and protection against data leakage.

Technical and technological: Ensuring the stability of work processes and technical equipment.

Human resources: Attracting highly qualified personnel and minimizing internal threats related to employees.

Legal: Compliance with the law, ensuring legal security.

Physical (power): Protection of physical assets and resources of the institution.

Threats to the economic security of financial and credit institutions (FCIs) are processes and phenomena that may adversely affect their operations and stability. They arise due to objective factors, such as natural, technical, and information factors, as well as due to the actions of other entities. The security of institutions is ensured through timely detection of threats and response to them, including their neutralization or minimization.

The process of ensuring the economic security of financial institutions begins with the identification of threats to their stable functioning. Identification of threats involves detection, study of their nature, direction of influence, assessment of probability and prevention of crisis conditions.

Identification is carried out using various methods that can be classified into:

- ❑ Expert assessment methods - including individual (interviews, analytical notes) and group assessments (commission methods, Delphi). Experts can be employees of a financial institution or external specialists.
- ❑ Economic and statistical methods - analysis of statistical data to monitor the environment and assess threats. These include methods of correlation, regression analysis, and the index method.
- ❑ Mathematical methods - used to model economic processes and require highly qualified specialists. This can be game theory, optimization methods, hierarchies.
- ❑ Economic methods - analysis of economic indicators to assess possible losses from the realization of threats. These methods include trend analysis, factor analysis, and the method of coefficients.

The external environment can be neutral, favorable, or hostile. It affects the functioning of a financial institution. Threats can be external (from competitors, customers, political threats) and internal (unprofessionalism of employees, technology malfunctions).

Threats are classified according to various criteria:

Sign	Types of threats
By field of occurrence	External (including reputational), internal
According to the form of existence	Potential, real
By nature of origin	Economic, political, social, institutional, informational, technological, environmental, etc.
By duration of action	Temporary, permanent
By the nature of the influence	Direct, indirect (indirect)
According to the degree of danger	Dangerous, especially dangerous
Predictably	Predicted, unpredicted

The result of the diagnosis of threats to the economic security of a financial institution is an assessment of its level of security, both in general and in terms of individual security components.

This allows us to identify the most vulnerable business processes, departments, and resources. The next step is to develop a mechanism for preventing and neutralizing threats, which is the basis for the stable and progressive development of the institution.

To ensure effective counteraction to threats, a financial institution must rely on reliable information data and a comprehensive analysis of the external and internal environment.

This emphasizes the importance of proper information and analytical support, which is a necessary basis for making informed management decisions in the context of ensuring the economic security of the institution.

Information and analytical support for the economic security of financial institutions (FIs) is key to effectively responding to threats and neutralizing risks.

This includes two main components:

- informational (data collection, processing, and storage)
- analytical - (processing information to obtain new knowledge).

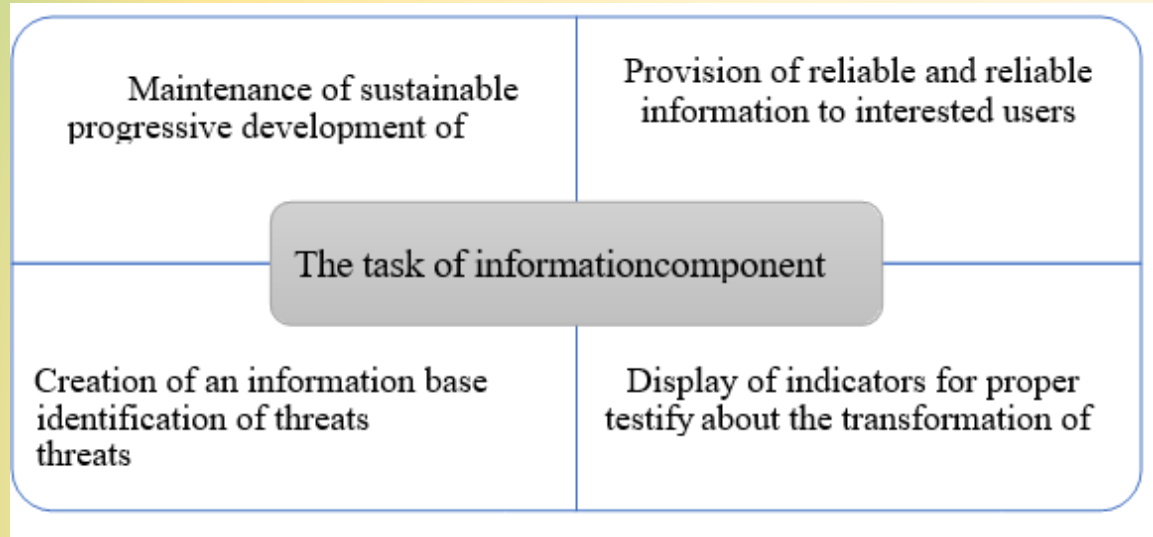
The information systems of the FCU should cover all areas of the institution's activities, including financial, operational, and administrative, ensuring stability and efficiency of management.

Information and analytical support acts as a basis for decision-making, allowing to assess the stability of the institution, its financial condition and adapt to changes in the external environment. It is also important to protect confidential information, as its loss can have critical consequences for the institution's operation.

CLASSIFICATION OF INFORMATION	<i>By sources of income</i> external; internal
	<i>In relation to the subject of research</i> main; auxiliary
	<i>By processing stages</i> primary; secondary
	<i>By frequency of receipt</i> permanent; periodic; one time
	<i>By content</i> accounting; reporting; normative; planned; market
	<i>By volume</i> sufficient; insufficient
	<i>By display method</i> textual; digital; graphic
	<i>By area of distribution</i> confidential; public
	<i>By coverage time</i> current; retrospective

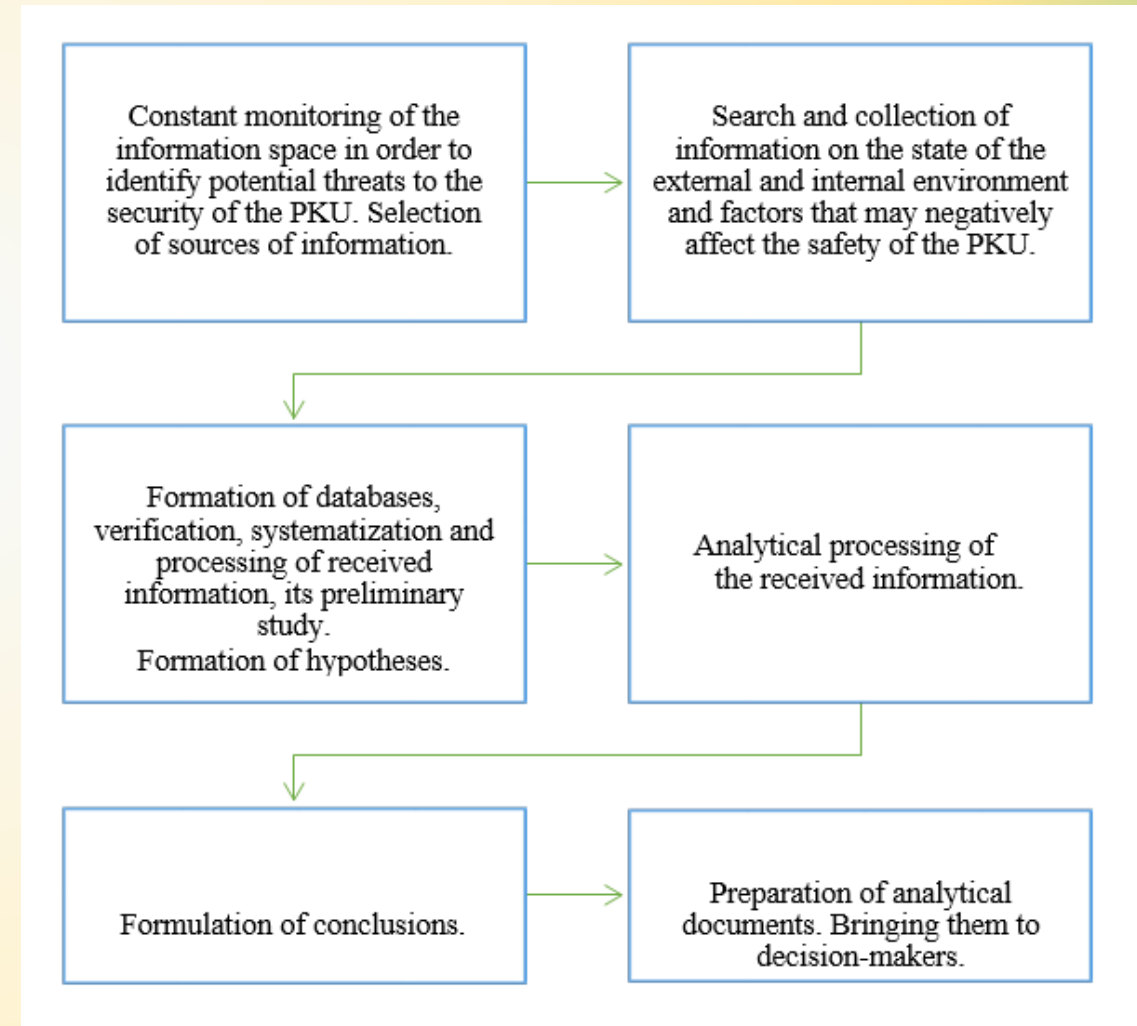
Rice. 1.5. Classification of information for the purposes of ensuring the security of financial and credit institutions

In our opinion, the information subsystem for ensuring economic security performs the following tasks:



Thus, in modern conditions, information and analytical work should be considered as an intellectual and creative activity that is difficult to formalize, collecting, processing, analyzing and interpreting information to support management decision-making. Specialists in information and analytical work must have theoretical foundations and practical techniques to ensure effective search, analysis and visualization of information in solving business intelligence tasks using modern information technologies and software tools.

In our opinion, the information and analytical support for the economic security of a financial institution is realized in the sequence of the following stages:



It is worth noting here that information and analytical support, in our opinion, should not only reflect the current and retrospective state of economic security of the FCU, but also provide guidelines for its assessment in the future. Therefore, the IASEB should have a forecasting function, i.e., prediction of events (processes) in the field of economic security of the FCU for the future, as well as prospective opportunities to ensure its security at the proper level.

A number of tasks can be identified that can be solved in this case:

- assessment of possible ways of development of financial and credit institutions in the context of ensuring economic security;
- predicting the direction of development and quantitative parameters of internal and external threats to the security of the FCU and their negative consequences;
- assessing the potential impact of positive and negative factors (processes and events) on the future development of the FCU in the context of ensuring its security;
- forming an idea of the forecasted scenarios in the field of economic security in connection with the implementation of certain measures aimed at improving its level.

The general trends in the development of financial and credit institutions of Ukraine demonstrate the significant impact of both external and internal threats on economic security. In the conditions of economic instability and unpredictability in the financial market, financial and credit institutions (FCU) need constant monitoring and diagnostics for timely detection and assessment of threats.

Financial and credit institutions of Ukraine face high risks due to economic instability. The banking sector remains key in the market, while the role of non-banking institutions remains insignificant. Since 2017, the number of financial and credit institutions has been decreasing, which increases concentration in the banking system and creates risks for competition. From 2016 to 2020, the resource base of banks increased by 22.7%, the share of equity capital increased, and liabilities decreased. The NBU regularly conducts stress tests to assess the stability of banks, but the high level of overdue debt continues to increase credit risks.

Despite the growth of investment activity of banks, the risks of economic security remain significant. The main threats include credit and currency risks, a high share of overdue loans and the risk of low liquidity, which increases the vulnerability of banks to crisis phenomena.

Indicators of the investment security component of the banking sector of Ukraine for the period 2016-2020

Indicators	2016 year	2017 year	2018 year	2019 year	2020 year	Growth rates/ deviation, %	
						2020 / 2016	2020 / 2019
General assets, billion hryvnias	1256.3	1333.8	1359.7	1494.5	1822.8	45.09	21.97
Investing in valuables papers, billion hryvnias	238.1	458.4	517.7	564.7	493.4	107.22	-12.63
Share in assets, %	18.95	34,37	38.07	36.06	27.07	8,12	-8.99

The instability of the financial security component of banks in Ukraine is caused by imperfect investment activities and the underdevelopment of the stock market. During the period 2014–2016, 90 banks were declared insolvent, and losses reached a maximum in 2016 due to the formation of insurance reserves for problem loans. However, since 2018, the financial result of the banking system has become positive, and in 2019, the profit reached UAH 59.6 billion.

The share of commission income in the income of banks increased from 16.45% in 2016 to 28.24% in 2020, but the negative return on assets (ROA) until 2018 indicated the low efficiency of bank assets. Only in 2018 did ROA turn positive and reach 2.44% in 2020. A reduction in deductions to reserves contributed to an increase in operating income, which stabilized the banking system.

The Financial Stress Index (FSI) is currently at a low level, although the COVID-19 pandemic has caused an uneven development of the economy. The rise of cyber-threats and cyber-attacks has become a major challenge for financial institutions, especially after going online due to the pandemic.

The greatest negative impact on the economic security of financial and credit institutions as an object of management, according to the results of the assessment, can be caused by such threats as:

excessive inclination to accept financial risks;

instability of the hryvnia exchange rate;

lack of sources of financing activities;

decrease in the level of business reputation;

decrease in the level of public trust in financial and credit institutions;

shortage and low quality of assets;

loss, damage, corruption, theft of information;

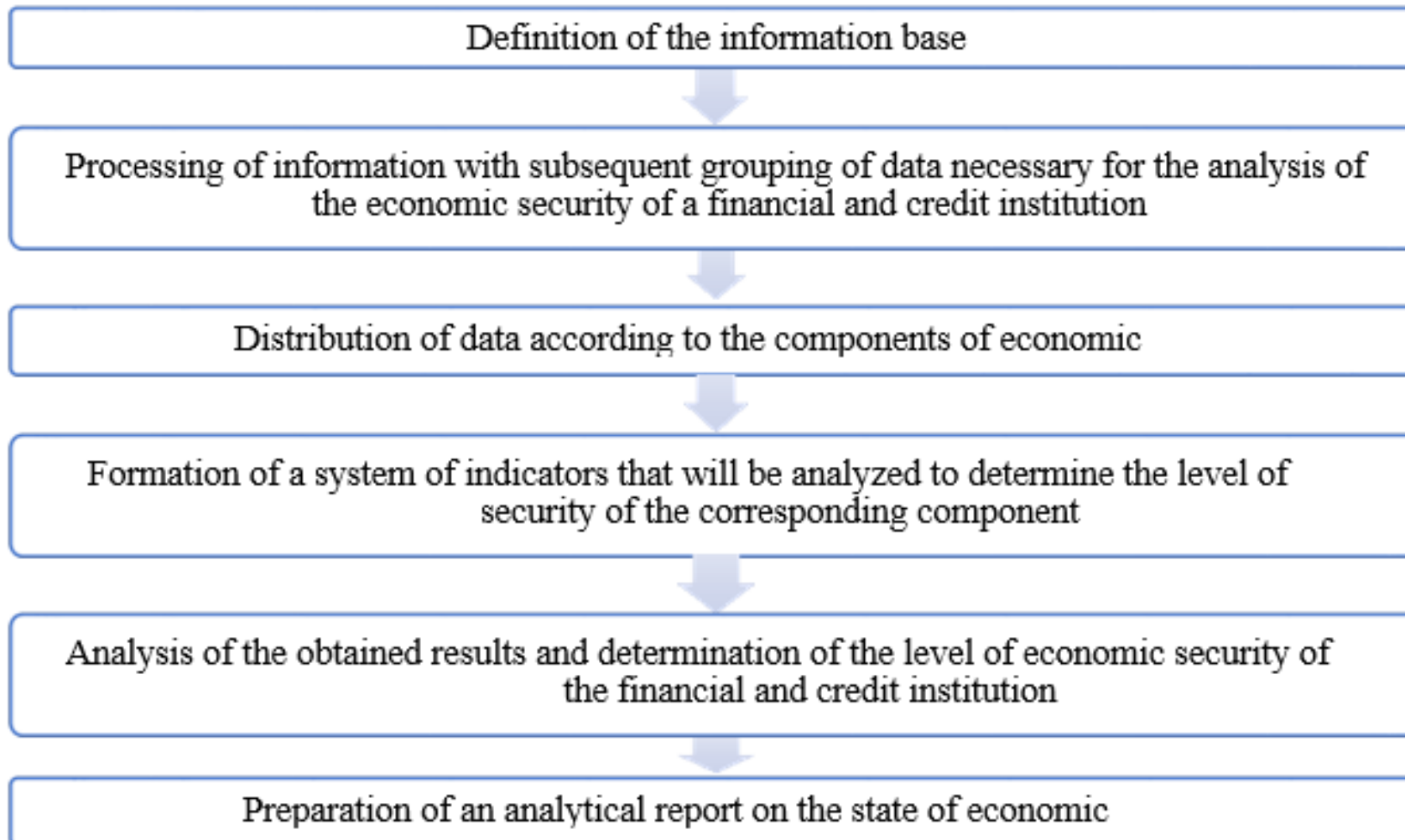
fraud by customers and staff;

low qualification of personnel (including the absence of specialists in the management of economic security).

Accordingly, taking into account the changes in the financial sector and the emergence of new types of threats affecting the economic security of financial and credit institutions, it is necessary to develop a methodology for ensuring the economic security of financial and credit institutions.

Assessing the economic security of financial and credit institutions is an important task facing the management staff of market participants, given the numerous challenges and threats that are constant companions of their activities.

When determining the level of economic security of a financial and credit institution, we identified the main stages of implementation:



In the conducted research, a comprehensive assessment of the level of economic security of domestic financial and credit institutions (FCU) was carried out, taking into account not only financial indicators, but also other important components. This made it possible to obtain a more accurate and comprehensive assessment of the economic security of banks.

The main goal of the work was to create a methodology that allows not only to assess the current level of economic security, but also to forecast its changes over time.

For this, a model was developed that includes four key components of economic security:

- Financial component, covering such indicators as liquidity, solvency, profitability, etc.
- An information component that assesses the bank's ability to effectively manage information resources and protect its data.
- A marketing component that takes into account the bank's strategies for attracting customers, developing products and services.
- Personnel component, which evaluates the level of personnel qualification, its stability and ability to respond to changes in the external environment.

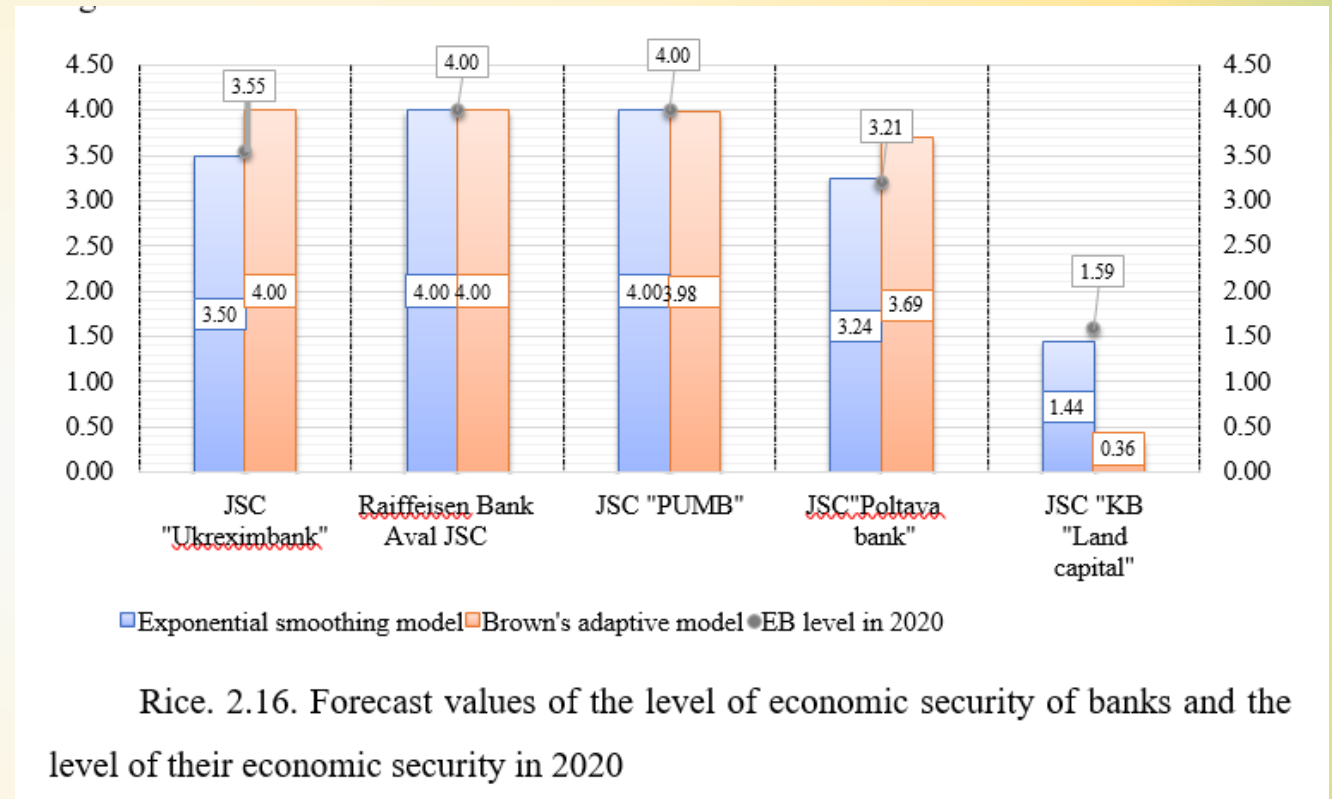
With the help of these components, a comprehensive assessment of economic security was carried out on the example of several banks, including such institutions as

- JSC "Ukreximbank",
- JSC "Raiffeisen Bank Aval",
- JSC "PUMB",
- JSC "Poltavabank"
- JSC "KB "Zemelnyi Kapital".

One of the important stages of the research was the application of two forecasting models:

Exponential smoothing model – This model allows for changes in the data to be taken into account, while paying particular attention to the most recent observations.

Brown's adaptive model is a method that makes it possible to adapt forecasting under the influence of variable factors that may fluctuate under conditions of uncertainty.



In particular, the results of the study showed that an incomplete picture can be obtained by evaluating only financial indicators. As an example, it was found that JSC KB "Land Capital" would have a high level of economic security according to financial indicators, but a comprehensive analysis revealed that the bank has an average level of economic security, as well as a negative downward trend. This was confirmed in reality: in July 2021, the NBU declared the bank insolvent, which corresponds to the forecast obtained during the study.

Thus, the study confirms that a comprehensive approach to assessing the economic security of the PKU, which includes financial, informational, marketing and personnel components, is the most effective. And also that the application of forecasting models makes it possible to accurately assess risks and trends that may affect the economic security of banks in the future.

The results of this study can be useful for national financial supervisory authorities, banking institutions and other financial market participants, as they provide accurate and timely information for management decisions.

The economic security of financial and credit institutions is the basis of national economic security, as the financial sector plays an important role in the development of the economy.

The mechanism for ensuring the economic security of the PKU is a system of methods and levers aimed at protecting the interests of the institution from internal and external threats.

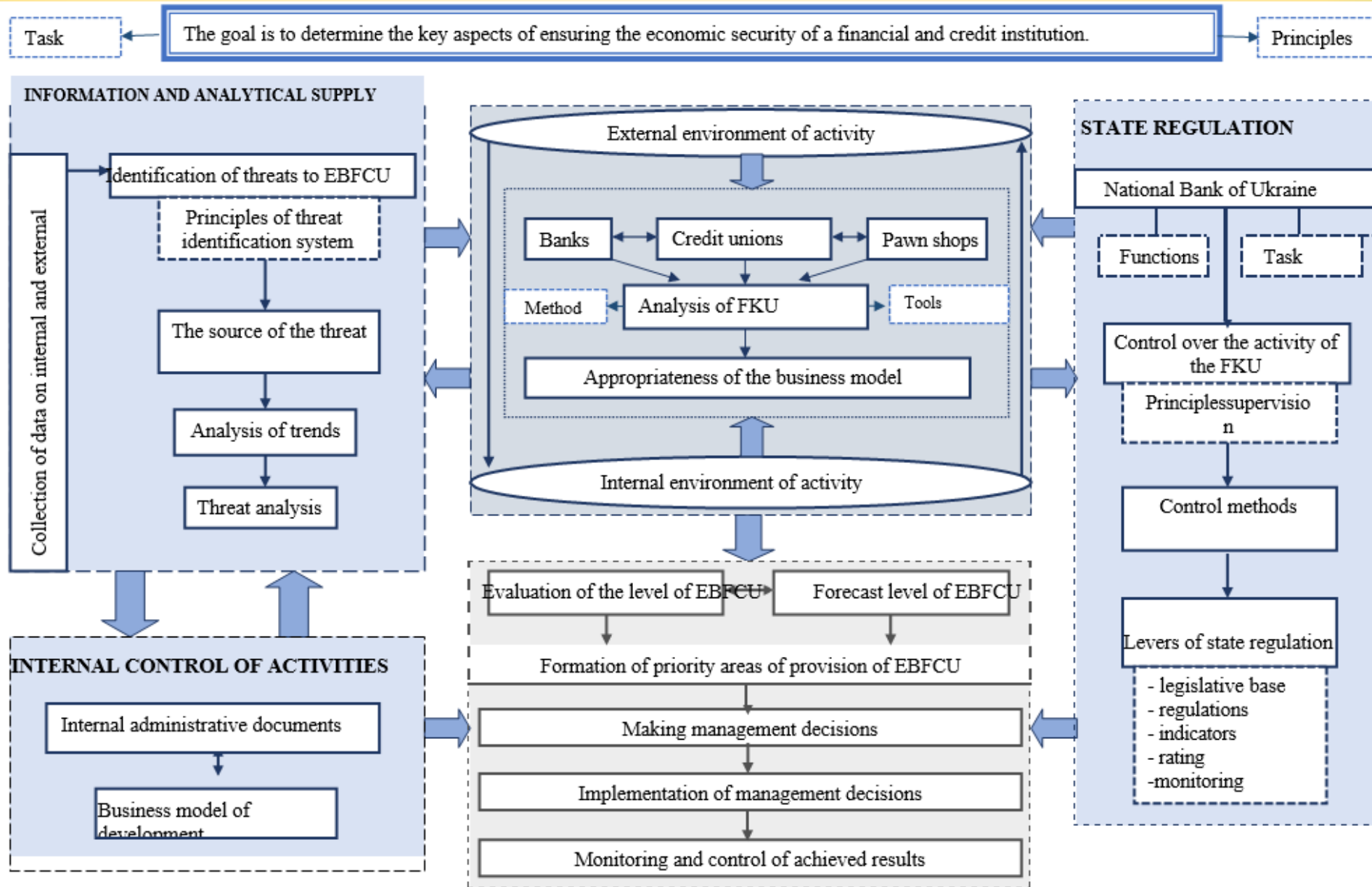
The main tasks of the mechanism:

Comprehensive analysis of PKU activity and identification of deviations.

Forecasting the level of economic security.

Formation of measures to eliminate negative impacts.

Assessment of the influence of internal and external factors on the stability of the institution.



Rice. 3.1. Conceptual model of the mechanism for ensuring the economic security of financial and credit institutions

Source: author's own development

Recommendations and suggestions:

1. Creation of a unified database to combat fraudulent encroachments on financial, informational, intellectual, personnel and other resources of financial and credit institutions. This database should contain information not only about fraud in a separate institution, but also about threats detected in other financial and credit institutions, with open access to data contained in public sources.
2. Identification and analysis of threats: The database will allow to classify the threats identified in different financial and credit institutions and to find out whether a threat from another sector or institution may have an impact on financial and credit institutions.
3. Development of effective measures to increase the economic security of financial and credit institutions, which will respond in a timely manner to new threats and contribute to the stable functioning of institutions.
4. Management and minimization of the impact of threats: Development of a mechanism for timely detection of threats and creation of plans to minimize their impact on the financial stability of the institution.
5. Determining the strategic goals of the institution's development and ensuring its stable financial condition through the mechanism of comprehensive assessment of threats and planning of measures based on these assessments.
6. Ensuring economic security at all levelsof financial and credit institutions using a systematic approach to identifying and countering threats in both stable and crisis conditions.

Thank you for your attention!