Finance, banking and insurance

UDC 336.7(100)+339.732.6

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THE ASSESSMENT OF INTERNAL CAPITAL ADEQUACY (ICAAP) FOR UKRAINIAN BANKS

Summary. *The purpose of risk management in Ukrainian banks is to provide a structure that defines responsibilities within the ICAAP process and determines the organizational structure of risk management and capital adequacy. Senior management determines the appropriate capital adequacy and corespondent reports. The task of risk management in Ukrainian banks is to provide a structure that defines responsibilities within the ICAAP process and determines the organizational structure of risk management and capital adequacy. Senior management determines the appropriate capital adequacy and appropriate reports. In this context, ICAAP is seen not as an isolated process, but as a process that should be part of the strategic and operational management of the bank and as a component of corporate governance. Parameters important to ICAAP are determined in the strategic management process. The bank's management should identify the main components of the ICAAP, including the bank's risk strategy and the principles of risk management policy. In this process, it is also important to establish transparent instructions and define appropriate responsibilities. The modern concept of assessing the internal capital of the bank contains all the procedures and measures of the bank to ensure appropriate identification and assessment of risks; the appropriate level of internal capital in relation to the risk profile of the bank; application of appropriate risk management systems; further development of appropriate risk management* *systems. According to this concept, capital planning is to determine the components of capital to cover risks.*

Key words: *bank capital adequacy, bank risk assessment, risk management concept, ICAAP, supervision and evaluation process, Basel II.*

Statement of the problem. On June 30, 2021, the National Bank of Ukraine published the Draft Regulation on the Organization of the Internal Capital Adequacy Assessment Process in Banks of Ukraine and Banking Groups. This document caused a lot of comments and was aimed at revision. The introduction of this provision was postponed. The main problem of the document is the imperfection of methodological approaches to the organization of the process of assessing the internal capital adequacy of Ukrainian banks. In our opinion, the methodological approach for determining the capital of the Basel II agreement is based on the concept of economic capital, or internal capital (the requirement of minimum capital based on the main risks of assets and operations of the bank). Understanding this process is important for analyzing the internal capital adequacy of Ukrainian banks. The article is devoted to this problem.

Analysis of recent researches and publications. The modern synthesis of the theory of economic risk covers its many characteristics, mainly related to the practical aspects of its use in various economic activities - insurance business, banking, investment, etc. The modern paradigm of risk management, the formation of which has developed intensively since the 1950s, is based on the portfolio theory of G. Markowitz, which is a method of forming an investment portfolio aimed at optimal choice of assets based on the desired return on risk. The theory formulated in the 1950s is the foundation of modern portfolio theory [1]. The second important model for estimating the value of capital assets belongs to W.F. Sharpe, who divided the overall risk of investing in securities into two parts: systematic risk and non-systematic risk. He developed the Capital Asset Pricing Model (CAPM). W.Sharpe called systematic the risk associated with the state of the financial market. In turn, the latter depends on changes in the economy and finances of the country, as well as changes in world trade, international capital movements, the state of currencies. The scientist proved that the risk associated with the system of economic and financial relations cannot be overcome by diversifying the portfolio proposed by G. Markowitz. Unsystematic risk is also called diversified, or portfolio. Its nature differs from the nature of systematic risk. Fisher Black and Robert Merton made significant contributions to risk management in the early 1970s by making discoveries in option pricing theory. This result is known as the Black-Scholes model. According to this model, the key element in determining the value of an option is the expected volatility of the underlying asset. Depending on the fluctuations of the asset, its price increases or decreases, which directly affects the value of the option. Thus, if the value of the option is known, it is possible to determine the level of volatility expected by the market and the model for estimating the value of options [2].

At the present stage, in countries with developed economies, the concept of enterprise-wide risk management is becoming more widespread. This relatively new concept of risk management system, which emerged in the late 1990s, is often referred to as integrated, or strategic, risk management. The conceptual framework of this approach was developed by COSO (The Committee of Sponsoring Organization) and set out in the document "Enterprise Risk Management - Integrated Model" [3]. The period of developing the conceptual framework for risk management was marked by corporate scandals and bankruptcies, which became widely known and caused significant losses to investors, company staff and other stakeholders. This has resulted in calls to strengthen corporate governance and improve risk management through the adoption of new laws, regulations and new requirements for the registration of securities on stock exchanges. One of the consequences of these events was the adoption of the Sarbanes-Oxley Act in the United States in 2002. This law extends the long-standing requirement for public companies to establish and maintain internal control systems, requiring company management to provide information on the effectiveness of these systems and an independent auditor. - certify the provided information. The document "Conceptual principles of internal control" has become a common standard in the implementation of these reporting requirements. Similar laws have been passed in other countries.

Formulation purpose of article (problem). The National Bank of Ukraine requires banks to assess market risks. Analysis of the literature has shown that so far there is little research on methods and approaches to market risk analysis. The regulation and supervision of banking, which is based on a new revised system of rules and incentives (Basel II), makes it possible to achieve the objectives of prudential supervision more effectively. This approach is an incentive for Ukrainian banks to improve their management and risk measurement methods, including the decision to reduce the amount of capital they are required to make. Therefore, the article focuses on the study of the modern approach to internal capital adequacy analysis based on bank risk measurement (ICAAP), as the experience of EU countries has shown that this system provides a more competitive field of banks by expanding and harmonizing their methods, increasing market discipline and formulating specific disclosure requirements.

The main material. In the EU, this process was initiated by The Committee of European Banking Supervisors (CEBS), which published a consultation paper entitled "Consultation Paper Application of the Supervisory Review Process under Pillar 2" and which was closed for comment on 31 August 2004 [4]. These new proposals became the basis for the adoption of the draft Capital Requirements Directive (CRD). In this document, CEBS revised its proposals to include some of the recommendations that emerged from the consultations. The processes and systems, collectively referred to as the Internal Capital Adequacy Assessment Process (ICAAP), provide the bank with adequate capital resources for all major types of risks and define responsibilities to ensure compliance with the risk capital strategy. The document was extended to include the principles of internal management in the process of assessing the capital adequacy of the institution (ICAAP). This document also provides detailed information on how the institution and its management should engage in internal Risk Assessment Systems (RAS) in the Supervisory Review and Evaluation Process (SREP). In our opinion, this document facilitated cooperation in the supervision and regulation of banks at the national level and at the level of the European banking community, as insufficient coordination could lead to duplication of supervisory standards. These guidelines aim to promote the convergence of supervisory practices, taking into account trends and national practices to achieve a reliable and efficient market.

The methodological basis for the formation of the ICAAP concept were the principles of Basel 2 - Rillar 2, which are aimed at strengthening the link between the risk profile of the bank, its risk management and risk mitigation system. Institutions must themselves initiate an appropriate risk management process, namely, to control, measure and aggregate their risks. Therefore, according to Basel 2 - Pillar 2, banks must carry out adequate assessment, capital planning and create an adequate amount of capital to counter the risks inherent in the bank, as well as to develop risk management processes. That is, ICAAP belongs to the institution, and supervisors should not interfere in this process.

The task of the supervisory is to assess the ICAAP on the adequacy of internal processes within the bank. According to the document, dialogue between the institution and its head is a key part of the oversight process. This document emphasizes the appropriate involvement of the supervisory authorities and the institution and the interaction between them in order to make this dialogue clear and consistent. The dialogue should cover all aspects of business risks and risk control, including systemic management risks - internal control and internal management systems. In order to ensure transparency and consistency of dialogue and to promote convergence of supervisory practices, the oversight processes in this document have been detailed. In particular, it is determined that the purpose of the Supervisory Review Process (SRP) is to provide banks with sufficient capital to support all the risks inherent in their business. Therefore, it is determined that banks develop and use reliable risk management methods in the process of their monitoring and measurement. A key point of the SRP is that supervisors should review and evaluate the internal capital of institutions to assess the adequacy of regulatory capital requirements.

It is determined that supervisors should take supervisory action if they are not satisfied with the outcome of this process, namely: it was planned that institutions would operate above the minimum regulatory capital ratio, and therefore supervisors should be able to require holding capital more than the minimum. It should be noted that the work on the formation of the internal strategy of capital adequacy management continued at the level of banks, banking groups and other institutions, in particular, global rating agencies and international audit companies.

For example, Moody's Risk Management Analytics works with banks to develop, deploy and document ICAAP and considers all significant risks, depending on the banks' unique portfolios. According to this methodology, ICAAP is developed, which helps to achieve the bank's business goals, as well as to verify compliance with the basic standards of regulatory authorities [5].

Moody's Analytics uses a step-by-step approach to ICAAP development. The first stage is aimed at developing an ICAAP structure that meets the institution's profile and risk appetite. During the implementation of the agency's guidelines, the organizational structure is built, systemic decisions are made, and the skills needed to measure risks, stress testing, exposure and optimal capital allocation are acquired. In order to optimize the use of capital to ensure the viability of the bank in times of crisis, the agency has identified the main components of ICAAP:

- ✓ development and formulation of the process of how the bank will manage its capital through economic cycles.

- ✓ introduction of effective policies, practices and methods that identify and help to overcome the full range of risks.
- ✓ creation of probable stress tests as tools for early detection of problems with the bank's capital.
- ✓ promoting the ability, knowledge, and skills of bank management to manage risks in changing circumstances.
- ✓ creation of documentation that implements the risk strategy and practice of the organization.
- ✓ introduction of methods, procedures, and information systems to ensure adequate capital.

These recommendations, closely related to the recommendations of the Basel Committee, have been incorporated and published in existing European Union directives to make them binding on credit institutions and investment firms operating within the EU. The requirements of Basel 2 are partly reflected in the revised EU Directive 2000/12 / EC, which serves as a basis for implementation in national legislation. For example, in accordance with this directive and national law in Austria, the legal framework is determined by the Austrian Banking Act (BWG) and the relevant rules of the FMA (Financial Market Authority). Therefore, all models, methods and processes for the implementation of ICAAP within BA AG are defined in accordance with the Standard Recommendations of UniCredit Group (UCG). The risk manual, as well as future corrections, amendments, or exceptions, must be approved by the Management Board of BA AG following a review and positive conclusion by UniCredit (UCI) as the holding company of UCG. The main components of ICAAP are shown in Fig. 1.

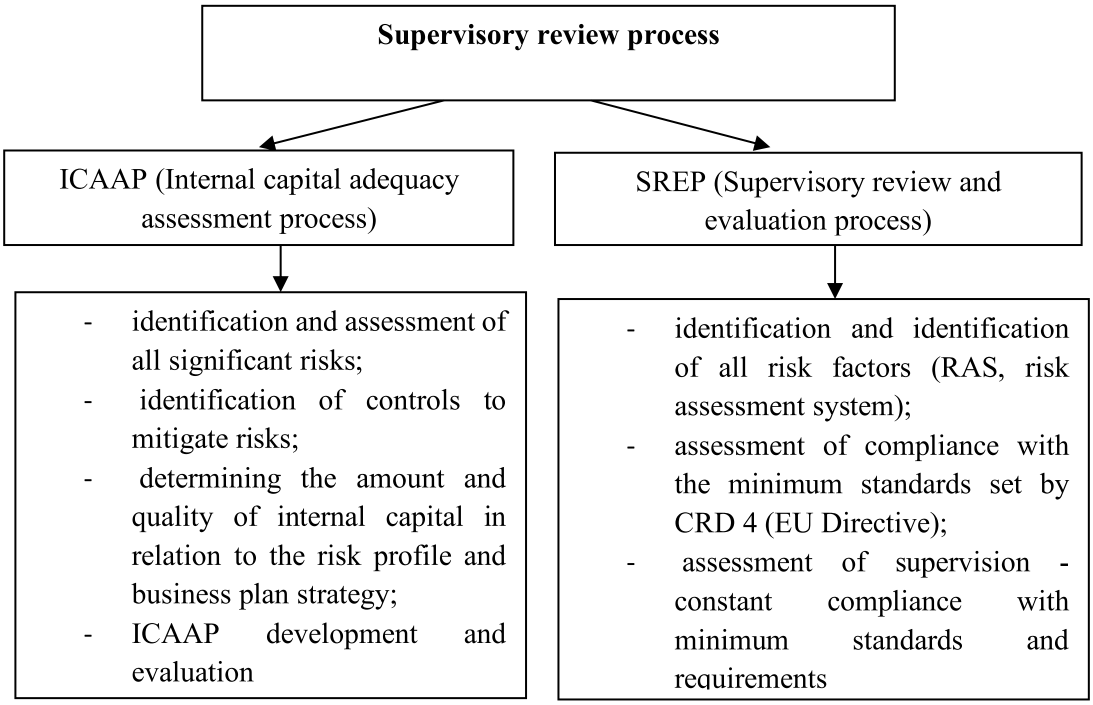

Fig. 1. The main components of ICAAP

Source: author's development by sources [5; 6]

As can be seen from Fig. 1, the main components of the regulatory requirements in accordance with the second component (Pillar 2) Basel 2 are as follows:

The first component. Supervisory Review Process (SRP). The main purpose of the SRP is to ensure that institutions have sufficient capital to support all the material risks they may be exposed to. Therefore, the bank must strengthen the link between risk and capital for the institution's risk strategy, approaches and risk management systems to be integrated with its capital planning. Institutions are expected to develop and use sound risk management methods to monitor and assess their risks.

Another component. Internal management. Internal management is outlined in Art. 22 and appendix. V to the CRD and aims to ensure that the governing of the institution (both the function of supervision and management) is clearly and transparently responsible for its business strategy, organization and internal control. Internal management is responsible for the governing body (both oversight and management functions). This concerns, first, the establishment of the business objectives of the institution and its appetite for risk and shows how business organizations are organized, how responsibilities and powers are distributed, how reporting lines are created, what information they transmit and how internal control takes place (including control risk, compliance and internal audit).

The third component. Supervisory Review and Evaluation Process (SREP) [6]. SREP is defined in Art. 124 and appendix. XI CRD and is carried out to assess the ICAAP, including the capital adequacy available to the institution. The supervisory body should check the impact of the institute on all significant risks (its risk profile), the adequacy and reliability of its internal management and ICAAP, the adequacy of its own funds against its own risks. The supervisor should also assess whether there is sufficient capital to prevent vulnerabilities in the facility.

It should be noted that these basic principles have been included in the CRD (EU Directive), Article 123. According to the first principle, the governing body (both supervisory and management functions) of the institution has the primary responsibility for ensuring that sufficient capital is in place. to meet their own funds and internal capital targets. This principle is set out in Art. 123. Of particular importance in this context is the role of internal management, as well as the Committee of European Banking Supervisors (CEBS), which is an independent advisory group on banking supervision in the European Union and develops additional guidance under Art. 22 and appendix. V to CRD. The remaining principles require ICAAP review and evaluation supervisors to conduct their own assessment of the institution's risk profile, to identify any weaknesses or inconsistencies, and, if necessary, to implement appropriate measures codified in Art. 124 and 136 and appendix. XI CRD. These principles apply to the supervisory review and evaluation process (SREP), the risk assessment system (RAS) and dialogue [7]. SRP extends beyond ICAAP and SREP because it covers ongoing supervisory monitoring of compliance with the institution, including the conditions in the CRD for the authorization of the IRB approach and adequate risk assessment systems (AMA). These conditions are set out in Art. 145 for continuous use of these models, as well as under conditions of high risk. However, these recommendations do not cover broader issues, although further recommendations may be provided.

An important element of SREP (including risk assessment systems - RAS) is the ability to qualitatively assess each type of risk and its management in the general context of internal management of the institution. The Risk Assessment Systems (RAS) process, as one of the key components of the supervision process, is a manager's tool for the organization. This means that the planning, prioritization and allocation and use of resources are key points of oversight as well as components of risk assessment management. This practical step-by-step guide is a fundamental tool for internal oversight. The guidelines set out in this document should lead to a more common approach of the authorities, which in turn should facilitate more effective communication between supervisors, especially between the competent authorities in the country and the host country.

Insights from this study and perspectives for further research in this direction. The analysis of methodical bases of regulation of process of an internal assessment of risks and capital adequacy of banks allows to draw the following conclusions for banks of Ukraine:

1. Banks must assess the overall capital adequacy in relation to their profile.

2. According to this assessment, banks should have a strategy to maintain the level of capital adequacy.

3. Supervisors (NBU) review and evaluate the strategy of internal capital adequacy of institutions, as well as their ability to control and ensure compliance with the requirements of own funds. Supervisors apply supervisory actions if they are not satisfied with the outcome of this process.

4. Supervisors expect institutions to work on minimum own funds requirements and try to maintain capital that exceeds the minimum level.

5. In the event of a decline in capital, supervisors should seek to intervene at an early stage to prevent capital from falling below the minimum levels required to maintain the risk characteristics of a particular institution and to require prompt remedial action if capital is not maintained and recovers.

6. The last key component is the interaction of ICAAP with SREP. This process involves supervisors in dialogue with banks to establish a risk strategy: how they identify, measure, aggregate and control the risks they take, and how they determine the overall risk potential. The dialogue should be structured in such a way as to cover the internal management (including risk control, compliance and internal audit), the organization of the institution's business and how that institution allocates capital for risk. Supervisors understand that the interaction between ICAAP and SREP must be a balanced process. This means that each component must perform its functions and thus strengthen each other.

7. The next study will focus on the process of forming the economic capital of the bank, which is a key parameter for assessing the capital adequacy of the bank.

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