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# MODERN PROBLEMS OF CAPITAL SUFFICIENCY REGULATION OF THE BANKING SYSTEM OF UKRAINE СУЧАСНІ ПРОБЛЕМИ РЕГУЛЮВАННЯ ДОСТАТНОСТІ КАПІТАЛУ БАНКІВСЬКОЇ СИСТЕМИ УКРАЇНИ СОВРЕМЕННЫЕ ПРОБЛЕМЫ РЕГУЛИРОВАНИЯ ДОСТАТОЧНОСТИ КАПИТАЛА БАНКОВСКОЙ СИСТЕМЫ УКРАИНЫ

Summary. The scientific article examines the problem of capital adequacy regulation, which is relevant for commercial banks and for regulators designed to supervise the functioning of the banking system of Ukraine. Such close attention to this problem is associated with the frequent formation of "imaginary" equity by many commercial banks in Ukraine, as the banking business (especially in today's Ukrainian economy) is characterized by risky activities. With proper regulation of bank capital adequacy simultaneously with the growth of capitalization of the banking system, will increase the attractiveness of

commercial banks for depositors and creditors, expand their resource base, improve the investment climate in Ukraine as a whole. The main tasks of development of the banking system of Ukraine in the conditions of strengthening their competitiveness in relation to foreign banks are highlighted, namely: to minimize dependence on increasing the adequacy of capital adequacy assessment of commercial banks to international standards, to strengthen supervisory requirements for real capitalization of commercial banks in terms of risk. The article proves that the main problem in determining the state policy of bank capital adequacy is the so-called "moral hazard", which should be understood as the desire of owners or managers of banks to conduct operations with higher profitability, shifting their inherent risk to a third party act as depositors, other creditors or the state. It is substantiated that it is the moral risk that can be manifested both in bank liabilities (excessive increase in the share of borrowed funds) and in bank assets (increase in the share of high-risk investments, including as "compensation" for capital increase at the request of the supervisor).

**Key words:** equity, bank capital adequacy, banking supervision, banking risks.

Анотація. В науковій статті досліджена проблема регулювання достатності капіталу, яка є актуальна для комерційних банків і для регулюючих органів, покликаних здійснювати нагляд за функціонуванням банківської системи України. Така пильна увага до даної проблеми пов'язана частим формуванням «уявного» власного капіталу багатьма комерційними банками України, оскільки для банківського бізнесу (особливо в умовах сучасної української економіки) притаманний ризикований характер діяльності. При правильному регулюванні достатності банківського капіталу одночасно зі зростанням капіталізації банківської системи, дозволить підвищити привабливість комерційних банків для вкладників і кредиторів, розширити їх ресурсну базу, поліпшить інвестиційний клімат в Україні в цілому. Висвітлено основні задачі

розвитку банківської системи України в умовах зміцнення конкурентоспроможності по відношенню до іноземних банків, а саме: мінімізувати залежність від підвищення адекватності оцінки достатності капіталів комерційних банків міжнародним стандартам, посилити вимоги органів нагляду в частині зростання реальної капіталізації комерційних банків, формувати капітал належними активами з точки зору ризику. В статті доведено, що при визначенні державної політики регулювання достатності банківського капіталу основною проблемою  $\epsilon$  так званий "моральний ризик", під яким варто розуміти прагнення власників або керівників банків проводити операції з підвищеною прибутковістю, перекладаючи властивий їм ризик на третю особу, в якості якої можуть виступати вкладники, інші кредитори або держава. Обтрунтовано, що саме моральний ризик може проявлятися як в банківських пасивах (надмірне нарощування частки залучених коштів), так і в банківських активах (збільшення частки вкладень з високим ризиком, в тому числі як "компенсація" за збільшення капіталу на вимогу органу нагляду).

**Ключові слова:** власний капітал, достатність банківського капіталу, банківський нагляд, ризики банківської діяльності.

Аннотация. В научной статье исследована проблема регулирования достаточности капитала, которая актуальна для коммерческих банков и для регулирующих органов, призванных осуществлять надзор за функционированием банковской системы Украины. Столь пристальное внимание к данной проблеме связано с частым формированием «мнимого» собственного капитала многими коммерческими банками Украины, поскольку для банковского бизнеса (особенно в условиях современной украинской экономики) присущен рискованный характер деятельности. При правильном регулировании достаточности банковского капитала одновременно с ростом капитализации банковской системы, позволит повысить привлекательность коммерческих банков для вкладчиков и

кредиторов, расширить их ресурсную базу, улучшит инвестиционный климат в Украине в целом. Изложены основные задачи развития банковской системы Украины *условиях* укрепления uxконкурентоспособности по отношению к иностранным банкам, а именно: повышения адекватности минимизировать зависимость omдостаточности капиталов коммерческих банков международным стандартам, усилить требования органов надзора в части роста реальной капитализации коммерческих банков, формировать капитал надлежащими активами с точки зрения риска. В статье доказано, что при определении государственной политики регулирования достаточности банковского капитала основной проблемой является так называемый "моральный риск", под которым следует понимать стремление владельцев или руководителей банков проводить операции с повышенной доходностью, перекладывая присущий им риск на третье лицо, в качестве которой могут выступать вкладчики, другие кредиторы или государство. Обосновано, что именно моральный риск может проявляться как в банковских пассивах (чрезмерное наращивание доли привлеченных средств), так и в банковских активах (увеличение доли вложений с высоким риском, в том числе как "компенсация" за увеличение капитала по требованию органа надзора).

**Ключевые слова:** собственный капитал, достаточность банковского капитала, банковский надзор, риски банковской деятельности.

Statement of the problem in general. Currently, the problem of assessing capital adequacy is relevant for commercial banks and for regulators to supervise the functioning of the banking system of Ukraine. Different approaches to assessing the capital adequacy of banks are widely discussed by experts in the field of banking in different countries, discussions are held both within national banking systems and at the level of international financial institutions. The

reasons for such close attention to this topic lie in the mutual (for banks and supervisors) importance of such a source of banking resources as equity.

The issue of assessing the capital adequacy of commercial banks is important for the development of the banking system of Ukraine. First, the current practice of forming "fictitious" capital by many, including the largest, commercial banks in Ukraine, is of serious concern to specialists. The solution of this problem in theoretical and applied aspects is of fundamental importance, because banking (especially in the modern Ukrainian economy) is risky. At the same time, a real assessment of the capital adequacy of the banking system, along with the growth of capitalization, will increase the attractiveness of commercial banks for depositors and creditors, expand their resource base, improve the investment climate in Ukraine. At the same time, the growth of capital adequacy will promote the development of banking operations, allowing commercial banks to compensate for the level of risks taken, the development of the loan capital market, financial markets.

One of the most important tasks of the banking system of Ukraine is strengthening their competitiveness in relation to foreign credit institutions, which largely depends on improving the adequacy of capital adequacy assessment of commercial banks to international standards, strengthening the requirements of supervisors in terms of real capitalization of credit institutions assets. The problems of regulating equity adequacy are extremely important for both the banks themselves and the banking system as a whole.

Analysis of recent research and publications. The study of theoretical and methodological foundations of capital adequacy of the banking system of Ukraine, as well as areas of its regulation are devoted to the works of domestic scientists: Alekseenko M., Vasilieva T., Varenyk V., Vovchak O., Gutsal I., Dzyublyuk O., Yermolenko M. Foreign scientists, in particular: I. Balabanov, G. Birman, V. Bocharov, S. Brigham, L. Hitman, R. King, O. Lavrushin, I. Larionova, Y. Maslenchenkov also make a significant scientific contribution to

the researched problems G. Panova, W. Sharp, S. Schmidt, J. Schumpeter and others.

Formulation of the purposes of the article. The purpose of this study is to substantiate the required level of capital adequacy of the banking system of Ukraine, as well as areas of its regulation in times of financial crisis. The tasks of the scientific article include: study of the essence of bank capital adequacy; assess the capital adequacy ratios of Ukrainian banks; to characterize the main directions of regulation of the level of capital adequacy, which are developed and adopted by the highest state authorities and establish the fundamental principles of building the banking system of Ukraine.

**Presentation of the main research material.** The problems of regulating the capital adequacy of the banking system of Ukraine have always been given special attention, as the own resources of commercial banks are the most important insurance fund to cover possible losses in the event of bankruptcy and a source of financing for banking operations. The term "capital adequacy" reflects the overall assessment of the reliability of the bank, the degree of its risk appetite [5, p. 1124]. The interpretation of capital as a "buffer" determines the inverse relationship between the amount of capital and the bank's risk appetite. Hence: the higher the share of risky assets in the bank's balance sheet, the greater should be its equity. However, it should be noted that the excessive "capitalization" of the bank, the issuance of excess shares in comparison with the optimal need for own funds is also not a boon. It negatively affects the bank's activities. Mobilizing cash resources through the issuance and placement of shares is a relatively expensive and not always acceptable method of financing for the bank. As a rule, it is cheaper and more profitable to attract depositors' funds than to increase equity.

In the process of evolution of any banking system, we can trace the influence of two different trends: the desire for maximum efficiency on the part of system participants (represented by the owners of commercial banks) and the

desire for greater stability by society as a whole (represented by the state). Stability of functioning is almost the main requirement of society to the banking system, which distinguishes it from any other sector of the economy. The special regulation of the financial and banking sector by the state is due to the specifics of banking, related to the production of special services (transformation of deposits into loans, issuance of liquidity instruments and accumulation of information about borrowers) and various negative consequences of banking crises national economy and social stability. It is obvious that banks occupy a special place among other specialized financial intermediaries due to the unique "duality" of their functions; passive (attracting depositors) and active (placing them on loan) Banks deal with financial contracts (loans and deposits) that cannot be resold as easily on the market as stocks, bonds or other securities. The liquidity of the latter is explained by their "anonymity" in the sense that the identity of their current owner does not matter to determine their market price. As a result, banks are generally unable to sell these contracts on the market and are forced to keep them on their balance sheets until they expire. In addition, financial contracts issued by borrowing firms (loan agreements) usually differ in scope and duration from the contracts required by investors (time deposits or demand deposits) [3, p. 88].

Thus, banks and other financial intermediaries are needed to transform financial contracts and securities in terms of volume, timing and degree of risk. In an ideal world of full information-efficient financial markets, individual investors and borrowers could easily achieve optimal risk allocation by diversifying their portfolios, but due to the existing real constraints (for example, on the volume of investments) perfect bank diversification is unattainable. Financial intermediaries can partially solve this problem by pooling investors' funds in order to avoid at least some of these limitations and ensure approximately the same risk diversification for all depositors, which they could get on their own in the presence of full financial markets. In any financial market, there is always the problem of information asymmetry, when some of its participants are better

informed about the potential risk of specific transactions or instruments than others. The imperfections of the financial market are considered as personal forms of information asymmetry: the previous - in the form of so-called "unfavorable selection", intermediate in the form of "moral hazard" and actual - in the form of "expensive state control". The essence of the concept of "adverse selection" in lending is that economic agents (both depositors and banks) in conducting active operations are faced with the problem of optimal choice of many possible options for allocating resources in incomplete or inaccurate information, when borrowers are consciously better informed about the risk of their projects than creditors [6, p. 56].

As a result, the lender is unable to set differentiated interest rates for borrowers with different levels of risk, which ultimately leads to unforeseen losses for the lender and additional costs for the average borrower. In determining the state policy of regulation of the banking sector, the central problem is the so-called "moral hazard", which in banking means the desire of owners or managers of banks to conduct operations with higher profitability, shifting their inherent risk to a third party, which may act as depositors, others creditors or the state.

Moral risk may be due to the structure of both bank liabilities (excessive increase in the share of borrowed funds) and assets (increase in the share of high-risk investments, including as "compensation" for capital increases at the request of the supervisor). In both cases, due to the limited liability of the bank's shareholders for their shares, the risk of loss is usually "transferred" to depositors and other owners of the bank's liabilities. The mechanism of "risk transfer" through the system of state deposit insurance at fixed (insensitive to the level of bank risk) rates is also well known. Reducing incentives for moral hazard and reducing the consequences of adverse selection in banking and are the main motive for state regulation of banking risks [2, p. 197]. Mechanisms for regulating the risks of the banking system are very diverse, and they are convenient to consider in hierarchical levels of perception and scope. these

mechanisms do not operate in isolation, but are in complex interaction with each other. In practice, they can be used in different combinations and with different efficiency, with the decisive role in the regulation of systemic risk is played by the mechanisms operating at the state and industry levels. At the macro level, regulatory mechanisms are developed and adopted by the highest state authorities and establish the fundamental principles of building the banking system of Ukraine. The basic institutions for regulating the systemic risk of the banking sector include:

- 1) restrictions on the composition of banking portfolios (including the separation of operations of commercial and investment banks within the so-called "commercial" banking system, the rules of mandatory reserve funds, etc.)
- 2) state guarantee (insurance) of household deposits in commercial banks of Ukraine:
- 3) the amount of liability of bank owners to creditors for the bank's obligations.

In addition to these basic mechanisms in world practice, there are also auxiliary mechanisms for regulating banking risks at the macro level.

- 4) restrictions on entry into the industry, expansion, mergers and acquisitions;
  - 5) restrictions on the maximum size of deposit rates and commissions.

At the mesolevel (banking system level), the main institutions for regulating banking risks are regulations of state supervision bodies (National Bank of Ukraine), as well as regulations and standards developed and voluntarily adopted by industry participants (for example, within self-regulatory organizations). State supervisors often work closely with supranational entities, such as the Basel Committee on Banking Supervision. At this level, the main institutional mechanisms for regulating banking risks are:

6) the minimum amount of capital for newly established banks, composition requirements and standards of bank capital adequacy;

- 7) liquidity standards of the bank balance sheet and credit risk concentration;
- 8) prudential control of regulatory authorities over compliance with mandatory standards, verification of banking risk assessment models, rules and procedures for liquidation of banks;
- 9) requirements for disclosure of information on the financial condition and risks of banks:
- 10) generally accepted measures for quantitative assessment of banking risks, methods of their calculation and / or regulatory requirements for the methods used in banks;
- 11) standards of organization and activity of internal control and risk management services in banks, recommended by supervisory authorities.

At the microlevel, at the level of individual commercial banks, in addition to the above external constraints can be used and their own, internal risk management mechanisms. These mechanisms are applied in the field, methods and models of risk assessment and control, the specific form of implementation of which is determined by the banks themselves. The most common institutional mechanisms for managing banking risks at the micro level include:

- 12) methods of assessing the borrower's creditworthiness and internal models of credit risk assessment;
- 13) internal models of quantitative assessment of market risk of banks' loan portfolio;
- 14) strategies used to limit market, credit, operational and other types of risk (limitation, hedging, internal control, etc.).

Conclusions and prospects for further research. The system of state regulation of capital adequacy of the banking system in Ukraine, formed as a result of long-term evolution, is based on three fundamental mechanisms: minimum standards of bank capital adequacy, state deposit insurance and limits on liability of bank shareholders for obligations to creditors. The subject of

further consideration will be the requirements for bank capital adequacy as a basic regulatory tool aimed at reducing the likelihood of bankruptcy of each individual bank and, consequently, to increase the stability of the system as a whole. A characteristic feature of most comments on the recent banking crises is the extremely frequent mention of bank capital. It is believed that not the least role in underestimating the development of financial crises (both in Ukraine and abroad) was played by shortcomings on the part of supervisors, which did not track the possibility of new risks in banking and did not strengthen control over these types of risks. in particular by imposing stricter capital requirements on banks.

### References

- 1. Alekseyenko M. D. Kapital banku: navch. posib. Kyiv: KNEU, 2004. 320 s.
- Varenyk V. A. Napryamy rozvytku bankivskogo regulyuvannya ta naglyadu v umovah yevrointegratcii Ukrainy // Visnyk sotcialno-ekonomichnyh doslidzhen. 2015. №1. S.196-201.
- 3. Vozhzhov A. P., Klymenko O. I. Bankivskyj kapital v ekonomitsi Ukrainy // Finansy Ukrainy. 2013. №8. S. 88–97.
- Mishchenko V. Kapitalizatsija bankivskoi systemy Ukrainy // Visnyk NBY.
   2013. №7. S.11–17.
- 5. Pasichnyk I. V., Kyebyedova K. R. Dostatnist kapitalu jak chynnyk stabilnosti bankivskogo sektoru dlja zabezpechennja strategichnogo rozvytku bankivskoi systemy // Ekovomika i suspilstvo. 2018. №19. S.1123-1128.
- 6. Savluk S. Vlasnyi kapital jak zapobizhnyk vtraty likvidnosti banku // Bankivska sprava. 2012. № 2. S.55–62.
- 7. Ofitzijnyj sajt Natzionalnogo banku Ukrainy. URL: <a href="http://www.bank.gov.ua">http://www.bank.gov.ua</a>.

# Література

- 1. Алексеєнко М. Д. Капітал банку: навч. посіб. Київ : КНЕУ, 2004. 320 с.
- 2. Вареник В.А. Напрями розвитку банківського регулювання та нагляду в умовах євроінтеграції України // Вісник соціонально-економічних досліджень. 2015. №1. С.196-201.
- 3. Вожжов А. П., Клименко О. І. Банківський капітал в економіці України // Фінанси України. 2013. №8. С.88– 97.
- 4. Міщенко В. Капіталізація банківської системи України // Вісник НБУ. 2013. №7. С.11–17.
- Ласічник І. В., Кєбєдова К. Р. Достатність капіталу як чинник стабільності банківського сектору для забезпечення стратегічного розвитку банківської системи // Економіка і суспільство. 2018. №19. С.1123-1128.
- 6. Савлук С. Власний капітал як запобіжник втрати ліквідності банку // Банківська справа. 2012. № 2. С.55–62.
- 7. Офіційний сайт Національного банку України. URL: http://www.bank.gov.ua.