FEATURES OF CONTEMPORARY BANK'S LIQUIDITY MANAGEMENT
ОСОБЛИВОСТІ УПРАВЛІННЯ ЛІКВІДНІСТЮ СУЧАСНОГО БАНКУ

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Modern banking is subject to an ever-growing set of regulations that put enormous pressure on its work. Before the global financial crisis 2008 regulatory requirements concerned the credit risk monitoring, capitalization of banking institutions. Daily these risks increase the risks of real-time transactions, deposit portfolio risks, risks caused by managing data arrays and modern cyber-threats. In the post-crisis time, the attention of the banking market state regulators has shifted to the requirements of effective liquidity management. Banks are intermediaries between liquidity supplying depositors and liquidity demanding borrowers. Current scientific approach considers the bank's liquidity much broader: from the simple imbalance of active and passive balance sheet items to the bank's ability to meet customer credit needs. Bank for International Settlements uses the term of global liquidity to refer to the ease of financing in global financial markets. Complete liquidity model for banks should include managing short-term and long-term liquidity, various development scenarios, optimization of banks' liquidity. To this aim banks can implement shorten asset maturities or lengthen liability maturities, improve assets average liquidity or own capitalization.
Key words: *liquidity, liquidity evaluation, liquidity risk, liquidity management, market regulator.*

Современная банковская деятельность подчиняется постоянно растущему количеству требований, которые оказывают огромное давление на его работу. До мирового финансового кризиса 2008 года нормативные требования касались мониторинга кредитного риска, капитализации банковских учреждений. Ежедневно эти риски увеличиваются за счет рисков транзакций в реальном времени, рисков депозитного портфеля, рисков, связанные с управлением массивами данных и современными киберугрозами. В посткризисное время внимание государственных регуляторов банковского рынка сместилось к требованиям эффективного управления ликвидностью. Банки являются посредниками между вкладчиками, предоставляющими ликвидность, и заемщиками, требующими ликвидности. Современный научный подход рассматривает ликвидность банка гораздо шире: от простого дисбаланса определенных активных и пассивных статей баланса до способности банка удовлетворять потребности клиентов в кредитах. В международной практике используется термин глобальная ликвидность для обозначения простоты/ доступности финансирования на мировых кредитных рынках. Полная модель ликвидности для банков должна включать управление краткосрочной и долгосрочной ликвидностью, различные сценарии развития, оптимизацию ликвидности банков. С этой целью банки могут вводить сокращенные сроки погашения активов или удлинять сроки погашения обязательств, улучшать среднюю ликвидность активов или собственную капитализацию.
Ключевые слова: *ликвидность, оценка ликвидности, риск ликвидности, управление ликвидностью, регулятор рынка.*

Сучасний банківський бізнес підпорядковується постійно зростаючій кількості вимог, що чинять величезний тиск на його роботу. До світової фінансової кризи 2008 року регуляторні інструменти стосувалися в основному моніторингу кредитних ризиків та вимог щодо капіталізації банківських установ. Щодня ці ризики збільшують ризики транзакцій у режимі реального часу, ризики депозитного портфеля, ризики, викликані керуванням масивами даних та сучасними кіберзагрозами. У післякризовий період увага державних регуляторів банківського ринку змістилась до необхідності ефективного управління ліквідністю. Передумови виникнення кризи ліквідності на національному банківському ринку створили такі несприятливі фактори: значна залежність вітчизняних банків від депозитних ресурсів; висока частка депозитів на вимогу в банківському портфелі; високі ризики кредитування та істотна частка проблемних позик; гостра потреба банків у фінансуванні та необґрунтоване підвищення ставок за депозитами. Банки є посередниками між вкладниками, що надають ліквідність, та позичальниками, що вимагають ліквідності. Сучасний науковий підхід розглядає ліквідність банку ширше: від простого дисбалансу відповідних активних та пасивних статей балансу до здатності банку задовольняти потреби клієнтів у кредиті. У практиці міжнародних розрахунків використовують термін глобальна ліквідність для характеристики простоти/ доступності кредитування на світових фінансових ринках. Кредит є одним із ключових показників глобальної ліквідності та перебуває у центрі уваги глобальних показників ліквідності, що оцінюються Bank for International Settlements. Повна модель ліквідності для банків повинна включати управління короткостроковою та довгостроковою ліквідністю, різні сценарії розвитку, оптимізацію ліквідності банків. Для цього банки можуть впроваджувати скорочення строків погашення активів або подовжувати строки погашення пасивів, покращувати середню ліквідність активів або власну капіталізацію. Банки можуть отримати захист ліквідності шляхом обумовлення продажу позик іншому банку або страхування кредитних ризиків, або ж розміщення активів у центральному банку, які можуть бути використані в якості застави для позики за умов кризи.
Ключові слова: *ліквідність, оцінка ліквідності, ризик ліквідності, управління ліквідністю, регулятор ринку.*

Introduction. Modern banking is subject to an ever-growing set of regulations that put enormous pressure on banks' work. By imposing additional requirements, macro-prudential policies may deter lending to over-risky borrowers or create the necessary capacity to absorb credit portfolio losses. For domestic banks liquidity risk is one of the most important among financial risks because savings banks need to increase their ability to meet deposit obligations.

Literature review. These problematic issues have been repeatedly considered in market regulators' documents [1; 2] and scientific researches [3-5; 7]. After the global financial crisis 2008 the regulatory requirements have shifted to liquidity risks monitoring and effective protection banks against them. The liquidity risk factor was and is now important for domestic banks since GFC had transformed on the national banking market to liquidity crisis.

Aims. The attention of modern banking regulation is shifting to monitoring liquidity risks and protects both the bank and its customers from them. The purpose of

the article is to analyze current banking liquidity problems and recommendations for their improvement.

Results. Banks are intermediaries between liquidity supplying depositors and liquidity demanding borrowers. Furthermore, they provide contingent liquidity in the form of loan commitments and liquidity backup lines [3].

Liquidity is a term with clear but related values, depending on the context. In literary sources, depending on the purpose of the study, there are generally three concepts of liquidity:

– asset liquidity;

– institutional liquidity;

– national liquidity.

In particular, asset liquidity is defined as the ease to liquidate an asset quickly with minimal liquidation losses. Therefore, the dimensions of asset liquidity are time and liquidation value [3].

Bank's liquidity is generally interpreted by economists as the ability of a bank to cover certain liabilities categories with the relevant assets groups.

Liquidity in banking refers to the ability of a bank to meet its financial obligations as they come due. Liquidity can ensure from direct cash holdings in currency or on account at the Central bank. Liquidity ensuring comes more frequently from acquiring securities that can be sold quickly with minimal loss. Bank's liquidity conditions, particularly in a post-crisis time, are affected by other factors than just cash reserve and highly liquid securities. For example, the maturity of its less liquid assets will also matter.

However, the current scientific approach considers the bank's liquidity much broader: from the simple imbalance of active and subtle balance sheet items to the bank's ability to meet customer credit needs.

Bank for International Settlements uses the term "global liquidity" to refer to the ease of financing in global financial markets. Credit is among the key indicators of global liquidity and the focus of the global liquidity indicators estimated by the Bank for International Settlements.

International cross-border and foreign currency credits as a key indicator of global liquidity have continued to expand in recent years to 38% of global GDP. This growth has been driven by international debt securities issuance, while the role of banks has diminished – both as lenders and as investors in debt securities. The aggregate trend has been more pronounced for advanced economies than emerging market borrowers [4].

Determining the level of a bank's potential assets involves three aspects [1]:

– what proportion of maturing assets will a bank be able to roll over or renew?

– what is the expected level of new loan requests that will be accepted?

– what is the expected level of draw-downs of commitments to lend that a bank will need to fund?

The proposed approach segregates the assets into three categories by their degree of relative liquidity:

– the most liquid category includes components such as cash, securities, and interbank loans;

– a less liquid category comprises a bank's saleable loan portfolio;

– the least liquid category includes essentially unmarketable assets such as loans not capable of being readily sold, bank premises and investments in subsidiaries, as well as, possibly, severely troubled credits;

– assets pledged to third parties are deducted from each category [1].

In addition to changes in approaches to the treatment of banking liquidity, the 2008 crisis has also changed the main approaches to managing liquidity risks.

Even before the GFC 2008 the importance of disclosure [2] and liquidity transformation [5] for effectively liquidity managing was repeatedly emphasized.

In Sound Practices [2] it is indicated on the important role of public disclosure in improving liquidity. Each bank should have in place a mechanism for ensuring that there is an adequate level of disclosure of information about the bank in order to manage public perception of the organization and its soundness. Public disclosure is an important element of liquidity management. Astute public relations management can help bank counter rumors that can result in significant run-offs by retail depositors and institutional investors.

In the traditional banking system, intermediation between savers and borrowers occurs in a single entity. Savers entrust their savings to banks in the form of deposits, which banks use to fund the extension of loans to borrowers. Credit intermediation involves credit, maturity, and liquidity transformation. Credit transformation refers to the enhancement of the credit quality of debt issued by the intermediary through the use of priority of claims. For example, the credit quality of senior deposits is better than the credit quality of the underlying loan portfolio due to the presence of junior equity. Maturity transformation refers to the use of short-term deposits to fund long-term loans, which creates liquidity for the saver but exposes the intermediary to roll over and duration risks. Liquidity transformation refers to the use of liquid instruments to fund illiquid assets [5].

Prerequisites for the liquidity crisis of the national banking sector had its own characteristics, namely:

– the significant banks' dependence on deposit resources;

– the high share of deposits "on the claim" in the banking portfolio;

– high risk of lending;

– high proportion of bad loans;

– the acute need banks for hot money and the unreasonable increase in deposit rates.

Basel III was the responding to the GFC 2008. The banking sector entered the crisis with too much leverage and inadequate liquidity buffers, poor gov-

ernance and risk management. The combination of these factors resulted in incorrect credit and liquidity risk assessments and excessive credit growth. Responding to these risk factors, the Basel Committee issued Principles for sound liquidity risk management and supervision.

Liquidity requirements, according to Basel III, are:

– a minimum liquidity ratio, the Liquidity Coverage Ratio, intended to provide enough cash to cover funding needs over a 30-day period of stress;

– a longer-term ratio, the Net Stable Funding Ratio, intended to address maturity mismatches over the entire balance sheet additional requirements for systemically important banks, including additional loss absorbency and strengthened arrangements for cross-border supervision and resolution.

Liquidity management is the management of cash flows across an institution's balance sheet and possibly across counterparties and locations. It involves the control of maturity/currency mismatches and the management of liquid asset holdings. A bank's liquidity management strategy sets out limits on such mismatches and the level of liquid assets to be retained to ensure that the bank remains able to meet funding obligations with immediacy across currencies and locations, while still reflecting the bank's preferred balance of costs of acquiring term liabilities or holding low-yielding liquid assets and risks associated with running large maturity. Accordingly, liquidity risk refers to a bank's inability to raise sufficient funds in the right currency and location to finance cash outflows at any given point in time [6].

The macro-prudential instruments implementation according to Basel principles is three-step:

– firstly, it gives banks flexibility in crisis or post-crisis times, thus enhancing their resiliency;

– secondly, it mitigates negative macro-prudential externalities;

– thirdly, it prevents imprudent depletion of capital resources.

However, one could envisage examples of potential conflicts between different macro– and micro-prudential instruments. For example, the macroprudential perspective could call for distressed banks to draw down their capital buffers to absorb losses without abruptly cutting back on lending to the real economy. At the same time, the microprudential perspective may be more concerned with the resilience of distressed banks and the need for such banks to shore up their capital buffers. Both perspectives are understandable and highlight the importance of coordinating macro- and microprudential policy regardless of their institutional setup [7].

According to the authors of study [3], the development of an internal, quantitative and complete liquidity model for banks should cover several aspects:

– firstly, the model should cover the product and the aggregate level;

– secondly, it should include short-term and long-term liquidity;

– thirdly, it should describe various scenarios such as expected and stressful scenarios;

– fourthly, it should relate to the modeling, management and optimization of banks' liquidity.

Banks can achieve liquidity in multiple ways such as shorten asset maturities or lengthen liability maturities, improve the average liquidity of assets or capitalization and more.

Banks can obtain liquidity protection. To this aim they can condition the loan sale to another bank or insure credit risks, or preposition assets in a central bank, which can be used as collateral to borrow cash in a crisis.

Conclusions. The problem of effective liquidity management has been faced by banks in the global financial crisis in 2008. Its importance has led to the implementation of new Basel III requirements and the corresponding requirements of the national state regulators of the banking market. The current approach considers bank liquidity broader. In this regard, banks' approach to managing their own liquidity should be comprehensive and coordinate managing the bank's credit and deposit portfolios. This thesis is especially relevant for domestic banks that are dependent on deposit resources and adhere to aggressive lending policy. Also the requirements for disclosure and consideration of liquidity transformation between credit and deposit portfolios are important for the national banking.

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FEATURES OF CONTEMPORARY BANK'S LIQUIDITY MANAGEMENT

The purpose of the article. The conditions of modern banking management have changed significantly. The approach to liquidity managing before and after the global financial crisis 2008 became another. Therefore, the attention of market regulation is shifting to effectively protect banks from liquidity risks. The purpose of the article is to analyze current regulatory problems and liquidity risks impact on their.

Methodology. These problematic issues have been repeatedly considered in market regulators' documents and scientific researches. Analysis of modern banking liquidity management is based on taking into conditions banks' liquidity and peculiarities liquidity management after Basel III.

Results. Before the global financial crisis 2008 regulatory requirements concerned the credit risk monitoring, capitalization of banking institutions. Daily these risks increase risks of real-time transactions, deposit portfolio risks and emerging liquidity risks. In the post-crisis time, the attention of the banking market state regulators has shifted to the requirements of effective liquidity management.

Prerequisites for the liquidity crisis of the national banking sector had its own characteristics, namely, significant banks' dependence on deposit resources; the high share of deposits "on the claim" in the banking portfolio; high risk of lending; high proportion of bad loans; the acute need banks for hot money and the unreasonable increase in deposit rates.

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Complete liquidity model for banks should include managing short-term and long-term liquidity, various development scenarios, optimization of banks' liquidity. To this aim banks can implement shorten asset maturities or lengthen liability maturities, improve assets average liquidity or own capitalization. Important role for the effective management of banks' liquidity had in the past and remain today the disclosure and consideration of liquidity transformation.

Practical implications. Implementation of liquidity management measures will help to ensure stable banks' state and enable banks to manage liquidity risks more effectively.

Value/originality. We have considered the features of current banking liquidity management. These problematic issues are especially important for banks that are dependent on deposit resources. New challenges and risks will determine the prospects for further research in this area.