

LIQUIDITY RISK AT COMMERCIAL BANKS AND FACTORS AFFECTING LIQUIDITY RISK

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ABSTRACT

In the commercial banking industry, liquidity risk plays a crucial role in ensuring the stability and strength of the financial system. Understanding and managing liquidity risk is an indispensable part of the business strategy of every bank. This article will delve deeper into the concept of liquidity risk in commercial banks and the related factors, from the bank's internal elements to external factors that can impact this risk. By carefully analyzing and identifying these critical factors, we can gain a more comprehensive and effective understanding of how banks can respond to and mitigate liquidity risk in the current volatile business environment.

Keyword: *liquidity risk, commercial banks, factors.*

1. OVERVIEW OF LIQUIDITY RISK IN COMMERCIAL BANKS

The Concept of Liquidity

According to Basel III, "Liquidity is a specialized term referring to the ability to meet available capital needs for business operations at any given time, such as deposit payments, lending, settlement, and capital transactions..."

According to Rose (2001), "Bank liquidity is the ability of a bank to obtain available capital at a low cost at the time the bank needs it." This suggests that a bank has good liquidity when it has a reasonable amount of available capital or can quickly mobilize capital through borrowing or asset sales. Accordingly, bank liquidity often has a very significant timing aspect. Most of the bank's liquidity requirements are immediate or nearly so. Most liquidity issues arise from outside the bank due to the financial activities of customers. In practice, customer liquidity issues often transfer to the bank. If customers lack capital in liquidity, they may borrow from the bank or withdraw funds from their deposit accounts. In both cases, the bank is required to meet the need for additional capital.

According to Duttweiler (2009), liquidity is the easy conversion of a specific asset into cash, and when the bank wants to convert that asset into cash, the market still has the capacity to accept the transactions.

Liquidity is the ability to convert a specific asset into cash quickly, at the lowest possible cost. More comprehensively, based on both the asset and capital approaches, liquidity is the ability to access assets and capital at a reasonable cost to serve the various operational needs of the bank (Truong Quang Thong, 2010).

In summary, liquidity is understood as the conversion of a specific asset into cash, and when this conversion into cash occurs, the market still accepts the transactions.

1.2. Liquidity Risk

Liquidity risk (Liquidity Risk) is the risk that a bank does not have the ability to adequately supply cash for immediate liquidity needs; or to supply enough liquidity but at a high or excessively high cost. In other words, this is a type of risk that arises when a bank lacks the ability to pay, due to the inability to convert assets into cash quickly, or inability to borrow to meet the requirements of payment contracts. Specifically, liquidity risk is a state of severe liquidity shortage, leading to the bank's inability to pay its due debts.

1.3. Causes of Liquidity Risk

Many studies have relatively unanimously pointed out that liquidity risk can come from the liability side or the asset side, or from the off-balance sheet activities of the commercial bank's balance sheet (Valla and Escorbiac, 2006). Additionally, according to Nguyen Van Tien (2015), it originates from both inside and outside the bank:

1.3.1. Reasons from the Commercial Banks' Side

Lack of cash to meet the bank's payment needs: This reason originates from both the bank's capital sources and assets. On the bank's capital side, it reflects the lack of cash to meet the payment needs of depositors or pay short-term debts that the bank has borrowed, leading to liquidity risk. On the asset side of the bank, it reflects the lack of cash to meet the disbursement needs for committed loans. When customers want to withdraw capital according to the previously agreed schedule, it creates liquidity needs. At that time, the bank must use cash reserves, borrow additional funds, or sell assets to meet the liquidity needs of customers (Truong Quang Thong, 2010).

Using short-term capital to invest long-term: Banks use the short-term deposits mobilized from various sources to finance long-term investments or lending. This has led to a mismatch between the maturity of investment, lending, and the maturity of the mobilized capital sources, where the cash flow collected from the investment assets is usually less than the flow of interest payments on deposits when they mature, as well as the need for customers to withdraw deposits (Truong Quang Thong, 2010).

Changes in market interest rates: Deposit and borrowing customers of banks are very sensitive to changes in market interest rates. When market interest rates rise, depositors tend to withdraw money from banks to invest in channels with higher returns; at the same time, borrowing customers will seek credit institutions with lower lending rates and vice versa. It can be seen that changes in market interest rates impact both depositors and borrowers, leading to an impact on the liquidity of commercial banks. Furthermore, trends in interest rate changes also affect the market value of the assets that banks may sell to increase the supply of liquidity and directly affect the borrowing costs in the money market (Truong Quang Thong, 2010).

Inappropriate liquidity risk management strategy: Banks have inappropriate and ineffective liquidity management strategies and methods, such as the securities they own having low liquidity, and the bank's reserves are not sufficient to meet payment needs. In the bank's asset portfolio, the bank has invested in stocks and bonds, the most important

of which are government bonds and treasury bills. Although government bonds and treasury bills do not have an attractive interest rate, they are an extremely important source for banks to receive discounts from the State Bank when liquidity is problematic. Smaller banks with weak financial capacity then find it difficult to compete with larger banks in bidding for these assets. Therefore, banks often choose high-risk portfolios with high returns to invest, and when risks occur, banks cannot quickly recover these loans, leading to liquidity shortages and creating liquidity risk (Truong Quang Thong, 2010).

1.3.2. Reasons from the Customer's Side

When the economy experiences major fluctuations or there are negative rumors about the political, social situation, or bad news originating from within the banks, a chain reaction of mass deposit withdrawals by customers will occur. At that time, banks cannot respond quickly enough to the need for cash, easily leading to a loss of liquidity and facing the risk of bankruptcy. This is an important reason coming from the outside, making it difficult for banks to use market tools to effectively regulate the liquidity situation. The business cycle of corporate customers is also an important factor causing liquidity risk for commercial banks. Depending on the different industries, businesses will have peak times during the year when they need more capital to serve their production and business activities or settle debts with other businesses, pay salaries and bonuses to staff, fulfill disbursement commitments to partners, resolve inventory, import goods... creating a cycle of tight capital between the bank and customers at the end of the year or peak periods of each industry (Nguyen Van Tien, 2015).

1.3.3. Reasons due to macroeconomic policy adjustments by the Government

The Government regulates the macro-economy through the State Bank using tools such as the required reserve ratio, various interest rates such as the base rate, refinancing rate, discount rate, and open market interest rate... However, if macroeconomic policies change too rapidly, it will lead to the risk of a liquidity crisis for commercial banks. On the other hand, if monetary policy and fiscal policy are not closely and reasonably coordinated, it will reduce the effectiveness of policy management and, at the same time, create

liquidity pressures for the commercial banking system (Nguyen Van Tien, 2015).

2. THE IMPACT OF LIQUIDITY RISK ON SOCIO-ECONOMIC ACTIVITIES AND BANKING OPERATIONS

Basel III points out that one of the root causes of financial crises is liquidity issues, which were largely overlooked by countries in general and credit institutions in particular in the past. The crisis has shown that banks heavily reliant on short-term money markets to finance their operations tend to face significant liquidity problems. Drawing lessons from the crisis, most central banks have become concerned about liquidity because it is a matter of survival for banks.

2.1. For the national financial system

Commercial banks play a crucial role in the overall financial market. However, in the course of their operations, commercial banks always face many inherent risks, among which the most important are credit risk and liquidity risk. When any type of risk occurs, it will cause certain losses to banks, increasing the operating costs of banks, leading to a decrease in bank profits, and in severe cases, banks may incur losses, leading to bankruptcy. This will cause shareholders to lose their investment capital, depositors to lose their savings. The poor financial condition of a bank reduces the confidence of depositors in the stability and ability to pay of the entire banking system, leading to a decrease in financial stability, impacting the financial situation of other banks, triggering chain reactions, and disrupting the stability of the financial market as a whole in the country.

2.2. For banking business operations

One of the signs that a bank is experiencing financial difficulties is the frequent occurrence of liquidity shortages. At that time, the bank's credibility in the market will decrease, leading to an increase in the number of customers withdrawing their deposits, and the bank will not be able to attract new deposits because people have lost trust in the bank. In addition, other banks are in a position to reluctantly provide support loans because they have to raise capital at higher interest rates than the interest rates for loans, further reducing the bank's profit. The increasingly severe liquidity shortage will lead to

the bank's loss of liquidity and eventually bankruptcy. A bank may go bankrupt if it does not meet the demand for liquidity, although technically, the bank may still be able to repay its debts.

2.3. For the economy and society

Banking business activities are related to the entire economy, to all small, medium, and large enterprises, and to all classes of the population, so when liquidity risks occur, not only do banks suffer losses but the rights of depositors are also affected. When banks face liquidity risks, which are manifested by the inability to pay, it can lead to the bankruptcy of several banks and the possibility of spreading to other banks, creating a sense of anxiety among the public. At that time, people tend to rush to banks to withdraw money in advance, which can lead to the risk of bankruptcy for a series of banks, and thus, the entire banking system is affected. Once the bank's credibility is greatly reduced, the banking system no longer performs its function as a financial intermediary, there is a lack of capital for business production, leading to economic downturn, increased unemployment, and social instability.

3. FACTORS AFFECTING LIQUIDITY RISK OF COMMERCIAL BANKS

3.1. Macroeconomic factors

Economic growth: In theory, banks will hold more liquidity during economic recessions when lending carries higher risks; conversely, during periods of economic growth, banks tend to reduce their liquidity reserves to lend more, while deposits may decline, thereby increasing the funding gap and increasing liquidity risk (Shen et al., 2009). Dinger (2009) argues that holding liquid assets is inversely related to economic growth. In the research model, the author expects a positive relationship between economic growth and liquidity risk.

Inflation rate: The relationship between inflation and bank liquidity risk is a quite controversial topic. Perry (1992) points out that the relationship between liquidity and bank performance depends on the level of expected inflation. If inflation is fully anticipated, banks can adjust interest rates to increase interest income faster than the increase in interest costs. Banks can therefore increase lending, while due to competitive pressure, funding activities may

decline, thereby increasing the funding gap and increasing liquidity risk. Studies by Vodová (2011, 2013a, 2013b) show that changes in inflation have a positive impact on liquidity risk. In this study, the author expects a positive relationship between inflation and liquidity risk. Changes in M2 money supply: According to Friedman (1963), the money supply growth rate must match the pace of economic development, and an excessive money supply will be the root cause of inflation. Changes in the money supply, through various central bank tools, can affect the liquidity of the commercial banking system. An expansionary monetary policy can increase liquidity for banks. Based on theory, the author expects an inverse relationship between M2 and bank liquidity risk.

3.2. Internal bank factors

Total asset size: According to the theory of economies of scale, the larger the bank's total assets, the less liquidity risk it will face. Large banks can rely on the interbank market or liquidity support from the lender of last resort (Vodová, 2013b). However, recent arguments such as "too big to fail" suggest that large banks, by enjoying implicit guarantees and advantages, can reduce their funding costs, allowing them to invest more aggressively in riskier assets, such as loans. Therefore, large banks are more likely to invest more in loans, thereby increasing the funding gap. In summary, the relationship between asset size and liquidity risk (funding gap) is expected to be nonlinear.

Capital ratio: This can be seen as a substitute for the Basel Capital Adequacy Ratio (CAR) within the framework of capital safety regulations (Vodová, 2013a). Equity capital is the cushion, the last line of defense against various risks of the bank (Truong Quang Thong, 2013). The author expects an inverse relationship between the equity capital ratio and liquidity risk. **Credit growth:** Credit growth is an important indicator of the source of risk for banks (Foos, 2010). High past credit growth is a cause of credit loss risk in the following years, while also reducing the capital ratio and leading to a decrease in the bank's solvency. Abnormal credit growth over a long period will lead to an increase in the bank's risk due to a decrease in solvency and an increase in the non-performing loan ratio. According to Amador (2013), excessive credit growth played a key role in the bank failures during the late 1990s financial crisis in Colombia, although abnormal

credit growth may also have a positive impact. To Ngoc Hung and Nguyen Duc Trung (2011) studied the Vietnamese banking sector, where the consequence of pursuing high credit growth in previous years while the risk management capacity of the banking system was still low, combined with unfavorable economic fluctuations, led to a significant increase in the non-performing loan ratio in 2011. Therefore, the author believes that the higher the credit growth rate, the greater the risk of bank defaults.

Loan-to-total assets ratio: Banks often focus on using their capital sources for traditional lending activities. Loans generally have low liquidity, so large and unexpected withdrawal of funds can lead to bank illiquidity (Bonin et al., 2008). Therefore, the author expects a positive relationship between the loan-to-total assets ratio and liquidity risk.

Loan loss provisions: The ratio of loan loss provisions to total loans (LLPTL) is also used to test the impact on liquidity risk. Loan loss provisions reflect the bank's credit risk level (Chen et al., 2018). Credit risk in turn will affect profits and liquidity risk. The higher the bank's expenses for loan loss provisions, the more it will increase liquidity risk.

4. CONCLUSION

Liquidity risk is an important part of commercial bank operations and plays a crucial role in maintaining the stability and flexibility of the financial system. To succeed, banks need to fully understand the internal and external factors that can affect their liquidity risk and implement appropriate risk management measures. Timely identification and assessment of potential risks, along with the establishment of flexible policies and procedures, are the keys to preventing and mitigating the negative impacts of liquidity risk. Additionally, continuously monitoring and reevaluating the risk management strategy is an indispensable part of ensuring the effectiveness and flexibility in risk management. In summary, understanding and managing liquidity risk is an ongoing process that requires great caution and high professionalism from bank managers. Only by continuously raising awareness and implementing strong risk management measures can banks face and overcome the challenges of today's banking business environment.

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