# Analysis on the Current Situation of Liquidity Risk Management in Commercial Banks

### Yuanyue Hu

Institute of Economics and Management, Jiangsu University of Science and Technology, Zhenjiang, China 469426992@qq.com

**Keywords:** Commercial bank, Liquidity risk, Regulatory indicators

**Abstract:** This paper is based on the international and domestic attention to liquidity risk, briefly introduces the five regulatory indicators of liquidity risk stipulated by China Banking Regulatory Commission, and briefly analyzes the problems faced by China's current liquidity risk management.

#### 1. Introduction

Liquidity risk refers to the risk that banks can not raise cash quickly or need to raise cash at a great cost to make new loans and repay due liabilities even though they have high quality assets and sufficient capital. As a real risk in commercial banks, in the 2008 U.S. financial crisis, liquidity crisis caused by lack of liquidity made many banks face unprecedented bankruptcy risk. Previously, the Basel Committee did not give clear supervision on liquidity risk. The cost and crisis brought by the lack of liquidity to commercial banks is undoubtedly heavy in the financial crisis.

After experiencing the financial crisis, the banking industry of various countries also reflected and summarized. In 2010, aiming at the liquidity risk in the financial crisis, Basel III introduced liquidity coverage ratio and net stable financing ratio, requiring financial institutions to ensure the quality of liquidity assets to cope with the sudden liquidity pressure. These two indicators prove that Basel III attaches great importance to liquidity regulation and liquidity risk resistance.

## 2. China's Current Regulatory Indicators of Liquidity Risk

China's management of liquidity risk of commercial banks is closely following the international pace. As a representative of emerging countries, he joined the Basel Committee in 2009. In 2018, the new version of the measures for liquidity risk management of commercial banks was officially implemented, which clearly stipulated five liquidity risk regulatory indicators, namely liquidity coverage ratio, net stable capital ratio, liquidity ratio, liquidity matching ratio and high-quality liquidity asset adequacy ratio.

## 2.1 Liquidity Ratio

The liquidity ratio mainly refers to the ratio between current assets and current liabilities of banks. Because commercial banks adopt the profit model of absorbing deposits, issuing loans and earning profits through interest difference, there will be the problem of term mismatch. In order to prevent the occurrence of insufficient liquidity, banks should maintain sufficient liquidity assets to maintain liquidity. According to the regulations, The liquidity ratio needs to be greater than or equal to 25%. At present, the liquidity ratio of China's commercial banks is far greater than this standard. Liquidity ratio directly determines the level of liquidity supply, but because the ratio only examines the liquidity risk of commercial banks from a short-term and static perspective, the evaluation of liquidity risk should be combined with other indicators.

## 2.2 Liquidity Coverage

As one of the two new quantitative indicators of liquidity supervision launched by the Basel

DOI: 10.25236/icemeet.2021.008

Committee based on the lack of liquidity supervision in the financial crisis, China's bancassurance Regulatory Commission (CIRC) has introduced the Chinese version of liquidity coverage index, which refers to the ratio of qualified high-quality liquid assets to the net cash flow in the next 30 days, on the basis of the Basel III agreement. The purpose is to ensure that commercial banks have sufficient qualified high-quality liquid assets to meet the liquidity demand for at least 30 days in the future. Basel III requires that the index be greater than or equal to 100%. As the liquidity coverage rate is not determined long ago, only the data after 2017 are disclosed on the official website of CIRC, which are all more than 100% of the minimum regulatory requirements and show a steady increasing trend, indicating that the short-term liquidity is abundant under the measurement of liquidity coverage rate. However, some joint-stock commercial banks may fail to meet the target due to the lack of short-term high-quality liquid assets.

## 2.3 Proportion of Net Stable Funds

As another important regulatory indicator for Basel Committee to deal with liquidity regulation in the 2008 crisis, The nsfr is mainly to reduce the mismatch between the capital and the corresponding debt resources within one year, and ensure sufficient capital sources to meet the bank's demand for stable capital. Net stabilization fund refers to the ratio of available stabilization fund to required stabilization fund. Among them, available stable funds refer to the sources of funds that financial institutions can still maintain long-term use (more than one year) in the event of external liquidity pressure. The stable funds needed by business are related to the assets that need to be supported by funds, and also need to be multiplied by the conversion rate to sum up. The conversion rate reflects the persistence of the stable funds needed by assets.

## 2.4 Liquidity Matching Ratio

The regulatory indicators of liquidity matching ratio measure the term allocation structure of major assets and liabilities of commercial banks, which is similar to the liquidity coverage ratio and the proportion of net stable funds, indicating the ability of raising funds to support the business development of commercial banks. However, This ratio focuses on the impact of asset liability maturity structure matching on liquidity. It refers to the ratio of weighted capital sources to weighted capital utilization, and the regulatory standard is not less than 100%. In order to achieve the regulatory standard of no less than 100%, commercial banks will reduce the investment in interbank assets and increase the loan business accordingly. Therefore, the implementation of this index will have a great impact on the asset liability structure of banks. According to the calculation of relevant departments, this index of commercial banks is more difficult to reach the standard than the other three regulatory indicators.

## 2.5 High Quality Liquidity Asset Adequacy Ratio

The adequacy ratio of high-quality liquid assets refers to the ratio of high-quality liquid assets to short-term net cash outflow, which is mainly to ensure that commercial banks have liquid assets that are easy to realize to meet the liquidity demand in the next 30 days. This index is similar to the liquidity coverage in concept, but considering that the liquidity coverage is not fully suitable for small and medium-sized banks in China, The overall measurement method of the index is more simplified, and the minimum regulatory standard is no less than 100%. The small and medium-sized commercial banks with assets size less than 200billion yuan are more suitable for this index.

#### 3. The Common Problems of Liquidity Risk Management of Commercial Banks

From 2015 to now, benefiting from the regulatory policy and macro environment, the liquidity ratio index of China's commercial banks has been increasing, which shows that the liquidity situation has gradually improved. However, the liquidity risk management of commercial banks in China is more complicated. The repeated "money shortage" events have seriously exposed the shortcomings of liquidity risk management. Specifically, the main problems are as follows.

## 3.1 Weak Awareness of Liquidity Risk Management

At present, most of the managers of China's commercial banks are still lack of consciousness in liquidity risk management and passively accept the central bank's regulatory measures. This situation is mainly because China's commercial banks shoulder the financing function given by the government, take the government credit as the guarantee, and the central bank provides the bottom for the commercial banks, thus relaxing the liquidity risk management of their own. Therefore, due to the influence of national credit, The managers of commercial banks lack the awareness of liquidity risk management, which makes the level of liquidity risk management at a low level for a long time.

## 3.2 The Liquidity Risk Management System is Not Perfect

At present, for China's commercial banks, the imperfect internal control system affects the evaluation of liquidity risk. The prediction of liquidity risk focuses on post supervision, and lacks the internal comprehensive risk management system of pre-warning, in-process prevention and regular summary after the event. Commercial banks rarely monitor the whole process of liquidity risk, but only use the asset liability ratio formulated during the inspection period of the central bank. The management method lacks flexibility in identifying, measuring and controlling the sudden liquidity risk. Moreover, for the management system, rigid liquidity risk regulatory indicators also affect the reflection of liquidity risk. In recent years, China's Banking Regulatory Commission (CBRC) has followed the pace of Basel III and scientifically set up liquidity risk indicators in China. However, the indicators are used to supervise commercial banks from a certain aspect or perspective, lacking a comprehensive index supervision system, and some indicators only focus on individual banks and are not suitable for all banks. The lack of flexibility and differentiation may lead to the homogenization of China's banks' liquidity supervision and the lack of innovation, thus increasing the liquidity risk.

## 3.3 There Are Great Differences in Liquidity Risk Management among Banks of Different Sizes

In the "liquidity risk management measures for commercial banks" implemented in 2018, China currently implements hierarchical management for different banks, with 200 billion yuan as the boundary, which is divided into larger commercial banks and small and medium-sized commercial banks. Most large commercial banks have formulated basic liquidity risk management system applicable to the bank in accordance with relevant laws. The level of management is also constantly improving, but it needs to be improved in specific detailed standards. However, due to their own objective conditions, most of the small and medium-sized commercial banks are struggling on the regulatory minimum standards in the face of the current "stratification" requirements. Since 2020, affected by the macro environment and epidemic pressure, many small and medium-sized commercial banks have delayed or directly cancelled the release of annual reports, which makes it difficult to raise the difficulty of market financing. It also shows that liquidity risk is an urgent problem to be solved, the current liquidity risk management and control of banks of different sizes is not balanced, and the measures to deal with liquidity risk management should also be classified and refined.

#### 4. Conclusion

Through the introduction of liquidity risk supervision indicators of commercial banks in China, we understand that these five regulatory indicators reflect the evaluation of liquidity risk from different levels. Commercial banks need to use these indicators well and disclose the data in time. Moreover, at present, commercial banks in China are still facing the common problems of lack of liquidity risk. Therefore, it is necessary to improve the awareness of liquidity risk, establish a comprehensive liquidity risk supervision system and coordinate the liquidity risk of different banks, which requires long-term consideration and continuous efforts of banking industry and regulatory departments.

## References

- [1] Antoniades. A, Liquidity Risk and the Credit Crunch of 2007-2008: Evidence from Micro-Level Data on Mortgage Loan Applications. BIS Working Paper, no.11, pp.47-49, 2014.
- [2] Berger A and Bouwman C. How Does Capital Affect Bank Performance During Financial Crisis. Journal of Financial Economics, no.109, pp.146-176, 2013.
- [3] Cihak M, Demirguc-Kunt A, Pería MSM, et al. Bank regulation and supervision around the world: a crisis update. World Bank Policy Research Working Paper, no.62, pp.67-69, 2012.
- [4] Valeriya Dinger. Doo foreign-owned banks affect banking systems liquidity risk. Comparative Economics, no.37, pp.30-35, 2009.