

# Liquidity Safety in Commercial Banking Activities in Vietnam

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**Abstract:** This article explores the current state of the banking system in Vietnam towards Basel III standards on liquidity. On that basis, some recommendations are proposed to commercial banks in the use of liquidity management technical tools and policies towards Basel III standards as a benchmark for all future banking activities.

**Keywords:** Basel standards, banking liquidity, liquidity safety ratio.

**Subject classification:** Economics

## 1. Introduction

Banking operations and prudential banking business always attracted attention from policy makers, economists, and economic researchers due to their inherent risks. In legal terms, the banking supervision frameworks Basel I, Basel II and Basel III show the adjustment of standards and rules in order to adapt to the realities of the banking and finance industry in the world. The Basel researches and standards were issued as the international standard frameworks which countries should pledge to observe or use as references in setting up their own standards for checking and monitoring their banking systems. Financial and banking crises all show that risks of all kinds in banking activities have consequently

resulted in liquidity risks when the banking system fails to meet clients' demands for withdrawal/lending. Aware of this fact, the Basel Committee issued the Basel Accord III (aka Basel III) which focused on dealing with issues relating to banking risk management, with supplementary criteria on liquidity risk management, in order to help buffer banks from future financial shocks and crises. Accordingly, Basel III places special importance on establishing a standard frame for liquidity risk management, namely (i) Liquidity Coverage Ratio (LCR), and (ii) Net Stable Funding Ratio (NSFR), together with other safety ratios and limits.<sup>2</sup> These regulations are gradually set up and scheduled to be officially applied in January 2018 (for NSFR).<sup>3</sup> The liquidity requirements through the Liquidity Coverage Ratio

(LCR) are aimed at guaranteeing a bank's cash outflows over 30 days and, through the Net Stable Funding Ratio (NSFR), the bank's medium and long-term cash outflows, at least one year [6].

The fact is that the banking system in Vietnam is in the process of implementing Basel II standards, but that does not mean that it does not take into account the requirements of ensuring safety in accordance with Basel III standards. Since 2014, although the financial and banking sector has been steadily stabilising, higher banking standards, including Basel II and Basel III, need to be implemented by countries to offer better banking accessibility to the economies and to close the maturity mismatch between banking funds and companies' investment/borrowing demands, as well as to avoid illiquidity pressures.

In that context, Basel II and III are considered as common patterns for many countries throughout the world. Therefore, this article will focus on surveying the reality of the banking system in Vietnam towards Basel III standards on liquidity safety, so as to propose some recommendations to commercial banks in exploiting technical tools and policies on liquidity management, with Basel III as the guideline for all banking operations in the time to come.

## **2. Implementation of standards on liquidity safety in Vietnamese commercial banks**

### *2.1. Legal regulatory frameworks*

In Vietnam, together with standards on minimum capital adequacy, liquidity

standards were mentioned very early in Decision No.107/QD-NH dated 9 June 1992 of the Governor of the State Bank of Vietnam on prudential regulations applied to banks. However, liquidity ratios under the Decision were very simple. The criteria are then amended and supplemented in accordance with Decision No. 297/1999/QD-NHNN dated 25 August 1999, and, more specifically, Decision No.457/2005/QD-NHNN dated 19 April 2005, which set up higher requirements, including the establishment of a liquidity stress-testing model in accordance with Circular No. 13/2010/TT-NHNN dated 20 May 2010 with two indicators relating to ratios between assets and liabilities. Circular No.36/2014/TT-NHNN dated 20 November 2014 (Circular No.36) continues to amend liquidity regulations with two indicators, namely solvency in 30 days and bank's liquidity reserve. However, while the circular is applied in commercial banks, various issues arose in relation to the ratio between bond holding and short-term funds, the risk weight factor of real estate loans, and the ratio of using short term funds (deposits) to finance medium- and long-term loans, etc. To tackle the issues, Circular No.06/2016/TT-NHNN was promulgated on 27 May 2016 to amend and supplement Circular No. 36 on a number of standards relating to liquidity ratios of banks. Accordingly, the minimum solvency ratio in the next 30 days in domestic currency is at least 50% (except for non-bank credit institutions, where the ratio is at least 20%)<sup>4</sup>, whereas, under Basel III standards, banks' LCR should be from 60% (as from 1 January 2015) and gradually up

to 100% (as from 1 January 2016), which means that Vietnam needs quite a long roadmap to meet Basel III standards.

According to Circular 06/2016/TT-NHNN, the maximum ratio of use of short-term funds for medium-long term loans is 60% until the end of 2016, and gradually decreasing to 50% since 1 January 2017, and to 40% since 1 January 2018. The roadmap has been issued to prevent banks from reducing the ratio of using short term funds to finance medium- and long-term loans in a sudden way. On the other hand, as soon as Circular 06 would come into effect (on 1 July 2016), banks which such ratio of or above 50% would not be allowed to grant any additional medium or long term credits. The limit of using short-term funds for medium- and long- term loans as stipulated in the circular also had certain implications on real estate credit, as most of real estate loans were medium- and long- term loans. Besides, liquidity ratios show banks' financial capacity to pay debts. This is measured with the Loan to Deposit Ratio (LDR)<sup>5</sup>. In line with Circular No.36/2014-NHNN, state-owned banks and foreign bank branches are allowed to maintain LDRs at 90%, whereas privately-owned commercial banks and other banking institutions are required to maintain the ratio at 80%.

Furthermore, the liquidity factor proves a bank's financial ability in satisfying demands for loan payments. This rate is measured through the bank's LDR. According to Circular No.36/2014-NHNN, State-owned commercial banks and foreign bank branches were permitted to maintain their LDRs at 90% while joint-stock commercial banks and other banking institution - at 80%.

## *2.2. Situation of banking liquidity and the implementation of liquidity safety standards in Vietnam's commercial banks*

In terms of bank liquidity, the LDR of the economy was increased from 89.06% in 2014 to 91.36% in 2015 and 95.12% in 2016, showing that the credit flow no longer stagnated in the banking system like in the previous years but already out flowed into the economy instead. In general, banks' liquidity had a good trend of development, and they were well liquid.

In reality, banks' liquidity is quite strong, with the interbank rates falling sharply to a record low in recent years. In 2016, the overnight rate was only 0.2%-0.3% at some points of time. The 2017 Banking Sector Report made by the Vietcombank Securities Company (VCBS) attributed that to the following facts:

(i) deposit-taking was accelerated as compared to the lending (the deposit growth rate was maintained at levels higher than those of the credit growth rate);

(ii) The State Bank of Vietnam (SBV) had bought a large amount of US dollars (approx. USD 11 billion in 2016) which helped increase the supply of the Vietnamese dong (VND);

(iii) Slow credit growth required banks to shift their capital flows to other investment channels. The difference between the monetary supply M2 and the credit growth returned to a positive status compared to a negative one in 2015 [2].

The following table shows that the growth rates of the banking system's deposits and lending activities were quite good.

Table 1: M2 Supply, Deposits and Loans, 2014-2018

*Unit: trillion VND*

	2014	2015	2016	2017	2018
M2 Supply	5,179.2	6,019.6	7,125.8	8,192.5	9,061.7
Deposits	4,457.9	5,096.0	5,998.3	6,840.0	7,611.4
Loans	3,970.5	4,655.9	5,505.4	6,512.0	7,111.0

Source: VIRAC, State Bank of Vietnam.

It is noteworthy that, though the growth rates of M2 supply and deposits in the economy tended to go down, that of the credit growth rates went up in the three years of 2015, 2016 and 2017, and, by November 2018, the rate went down to 12.3% (Table 2). This proves that a portion of funds within the economy has been

moved from savings to lendings and investments; the banking system's capital was relatively adequate and the liquidity had been improved considerably.

Besides, the yearly increasing LDR ratio in the economy also reflects this tendency and the State Bank of Vietnam has timely regulated commercial banks' credit activities.

Table 2: Growths of M2 Supply, Deposits and Loans, 2014-2018

*Unit: percent (%)*

Growth rate	2014	2015	2016	2017	2018
M2 Supply	17.69	19.37	18.38	14.19	10.61
Deposits	16.23	14.31	17.71	14.5	11.28
Loans	15.81	16.27	18.25	16.96	12.3

Source: VIRAC, State Bank of Vietnam.

The credit growth rate is not overheated, being still under control of the SBV, which is demonstrated by the fact that the targets for the rate set by the central bank were no longer exceeded as they had been in the period of 2007-2009. Besides, the good control of the SBV over credits is also demonstrated by the fact that inflation rates of the Vietnamese economy in the past four years have been

very low (the average inflation rate over the four years was only 2.5%), while the average GDP growth was over 6%. This shows the effectiveness of the SBV's monetary policies over the recent years.

In terms of applying the maximum rate of short-term funds used for medium- and long-term loans, although liquidity of the banking sector in 2016 was much better

than of 2014, there remained risks to banks' liquidity balance, specifically the ratio of using short term funds for medium- and long-term loans. If, in 2014, the rate was 19.42%, and it then slightly rose to 20.15% in 2015, the figure went up sharply to 34.51% in 2016. In 2017 and 2018, it seemed to decrease in some joint-stock commercial banks like VP Bank, VIB and MB (Table 3).

In 2015, the ratio of short-term funds used for medium- and long-term loans was adjusted from 30% to 60%. The purpose was to encourage banks to extend medium- and long-term credits to lend to businesses and priority sectors so as to encourage individuals and enterprises to further invest and expand their operations. However, if the ratio was at between 50%-60%, banks would face relatively high liquidity risks.

Table 3: Ratio of Short-term Funds Used to Finance Medium- and Long-term Loans in Some Commercial Banks, 2014-2018 (%)

*Unit: percent (%)*

Bank	Short-term funds to medium and long-term loans ratio					Annual average growth of long-term loans
	2014	2015	2016	2017	2018	
ACB	23.7%	27.4%	24.3%	23.97%	NA	19.2%
BIDV	29.8%	37.5%	43.0%	35.5%	NA	23.1%
VCB	15.8%	24.9%	30.4%	NA	NA	26.7%
VP Bank	26.1%	46.5%	38.6%	30%	33.6%	43.6%
Techcombank	11.8%	45.9%	41.5%	NA	NA	43.5%
MB	19.8%	22.9%	39.6%	41.11%	33.45%	46.4%
VIB	27.7%	39.3%	47.1%	40%	36.5%	34.2%
Eximbank	24.2%	48.9%	53.2%	53.23%	NA	23.5%

Source: Financial statements of commercial banks.

In addition, in recent years, banks focus on retail banking business by offering retail services attached to deposit products instead of developing deposit products themselves. Therefore, most deposit terms are short, rather than long ones. Meanwhile, borrowers are wholesale customers, namely large enterprises, who have demands to borrow large amount and in long term. Therefore, most loan terms are long ones.

Besides, banks pay less attention to short term consumer loans due to high fund management costs and low consumer loan interest rate caps. Obviously, most banks gained a rapid growth in short-term deposits while their long-term credit outstanding balance sharply increased. It is explained that there were differences in business strategies on liabilities and asset management, which leads to mismatch in

maturity between assets and liabilities; the ratio of using short term loans for medium- and long-term loans was increasing in 2016 compared with 2014 and 2015. Maturity mismatch was also a cause of rising risks in the banking sector.

Regarding the percentage of short-term funds used as medium- and long-term loans, State-owned commercial banks have the second lowest percentage in the whole system, at 37.32% (the lowest kept by cooperative banks which mainly implement policies rather than engaging in business activities). Therefore, State-owned commercial banks' operations were quite safe, with few risks; this is one of the reasons why they only keep a low capital adequacy ratio (CAR).

The ratio of short-term funds used for the medium- and long-term loans tended to increase higher among joint-stock commercial banks. Up to the end of 2016 and 2017, the ratio in the Eximbank, a joint-stock commercial bank, was always high, 53.2%; that of the VIB, another joint-stock commercial bank, were 47.1%, 40% and 36.5% in 2016, 2017 and 2018 respectively. That of Techcombank was 41.5% in 2017. Though lower than the maximum limit as stipulated in Circular No.36 (60%), those figures still show a relatively high level of liquidity risks. Obviously, the joint-stock commercial banks maintained a higher minimal CAR. For example, the Eximbank's CAR was 16.2%, that of the VIB - 13.2% and Techcombank - 11.2%.

Regarding the loan-to-deposit ratio, according to the data from StoxPlus, the

figures seen in 15 major banks in the period of 2012-2018 were as Table 4.

In general, in the period of 2012-2018, the credit growth rate was high and commercial banks made great efforts in seeking funds for the demand of credit outstanding balance growth. Table 4 above shows that the loan outstanding balance versus the total deposits at some commercial banks was very high, even significantly surpassing 100%, especially in some State-owned commercial banks like Vietinbank, BIDV and Agribank. The fact proves that commercial banks in general experienced an alarming period of "liquidity strain". Circular No. 36 was clearly effective because the ratio tended to go down, to even very low rates, at some banks like Lien Viet Post Bank (52.45%) and MB (58.53%)... in 2014. The growth rates of loan outstanding balance and deposits stood at approx. 16% on average in the three years of 2014 to 2016, in which the growth rate of the mobilised deposits in 2016 was 16.27% and the credit outstanding balance was 16.03%, as put forth in the plan. However, the efficiency of loans also got higher, with the LDR ratio increased from the average of 77.13% (2014) to 79.77% (2015) and then 90.30% (2016). What is more concerning is that the figure tended to go up in 2017 and 2018, at 95.7% and 96.9% respectively. The ratio was particularly high in 2016, which showed that banks had great demands for borrowing (from depositors) to finance the assets which are less liquid but with higher profitability. This sent a warning regarding liquidity risks.

Table 4: The Loan-to-deposit Ratio in Some Commercial Banks in Vietnam, 2012-2018 (%)  
*Unit: percent (%)*

Bank/Year	2012	2013	2014	2015	2016	2017	2018
ACB	80.90%	76.49%	74.21%	76.50%	78.05%	82.24%	85.38%
BIDV	110.21%	113.57%	99.68%	104.66%	98.29%	100.8%	99.91%
Vietinbank	114.04%	102.33%	102.67%	108.23%	100.01%	105.01%	104.74%
Eximbank	105.48%	103.99%	84.96%	85.23%	83.85%	86.2%	87.74%
Kien Long	89.67%	90.23%	80.81%	80.08%	85.62%	94.49%	100.91%
LienViet	54.64%	52.12%	52.45%	71.46%	70.92%	78.44%	95.39%
Post Bank							
MBBank	62.14%	63.17%	58.53%	65.75%	76.32%	72.99%	73.3%
National	103.21%	72.19%	67.29%	59.42%	59.97%	70.23%	75.66%
Citizen Bank							
SHB	71.77%	82.99%	83.62%	87.35%	96.40%	101.74%	96.34%
Sacombank	88.30%	82.96%	77.67%	70.37%	67.35%	69.7%	73.49%
Vietcombank	82.66%	80.62%	74.91%	75.65%	76.67%	76.74%	78.86%
VIBBank	85.28%	79.36%	76.02%	88.22%	99.84%	74.8%	77%
VPBank	61.37%	61.86%	71.30%	88.33%	115.18%	71%	73.7%
An Bình	63.83%	61.87%	56.53%	64.23%	76.10%	82.74%	83.82%
Agribank	95.58%	90.05%	82.79%	80.97%	NA	86.01%	87.37%

Source: StoxPlus data.

In 2017, banks had to further restructure their loans and deposits portfolios in order to reduce the ratio of short-term funds used to finance medium- and long-term loans down to below 40% in 2018. In addition, they were also making efforts to increase their equity to ensure the CAR ratios, to meet with new regulations on the risk weight factor of real estate loans of up to 200% as from the beginning of the year, and to meet their own demands for growth of total assets via issuing long-term bonds and dividend payment in shares, or issuing bonus shares...

### 3. Conclusion

The State Bank of Vietnam has promulgated a number of legal documents in order to apply, first and foremost, Basel II standards in the banking system. In that context, Circular No.36 was a step forward, taking liquidity risks into consideration and gradually getting compatible to Basel III standards with regulations on ability-to-pay rate, which is rather close to the Liquidity Coverage Ratio (LCR) under Basel III standards. However, the circular's requirements were still lower than those of the Basel III, as it contained no requests on

qualitative supervision over liquidity risks and on setting up liquidity risk assessing/analysing systems. The factors play a significant role in a bank's decisions on maintaining their own liquidity in a certain period. However, the majority of Vietnamese banks have so far, and supervision has until now been, focused mainly on quantitative criteria, revealing a potential gap of liquidity risks within the country's banking system. Following are some recommendations for Vietnamese commercial banks to guarantee their liquidity safety and move on the pathway of applying Basel III standards:

(i) *Measuring, analysis and management of liquidity on a daily basis*: This can be done by banks using two instruments: The liquidity gap and the liquidity supply-demand sheet (by duration of terms). Analysing the liquidity gap can provide more details of the net differences in liquidity supply and demand at a certain point of time. The liquidity supply-demand sheet is a report based on asset distributions in Debits, Deposits and Current/expected Off-balance Sheet in due terms and the liquidity. Therefore, these two instruments will be very useful in establishing liquidity limits, supervising liquidity daily, designing liquidity scenarios, simulating liquidity and testing stress to propose early warnings, recommendations and solutions;

(ii) *Designing and strict observation of liquidity limits*: Depending on its liquidity risks, each bank needs to build its own sets of liquidity norms, guaranteeing the balance of cash inflows/outflows as well as the balance of mobilised capital/short- and long-term loans. Strictly following liquidity

norms will help banks control and anticipate their liquidity shortages.

(iii) *Enhancement of examination, supervision and internal audit*: Banks should carry out periodical independent assessments on strategies, policies, procedures and processes relating to their liquidity management.

(iv) *Improvement of managers' awareness of risk management, compliance with law, and revision of risk management practices*, including the practices of managing liquidity risks. Previous researches by Rose (2011) [7]; Truong Thi Hoai Linh, Phan Hong Mai (2015) [5] clearly pointed out that a bank director's ability has favourable impacts on his bank's liquidity situation. The higher the director's abilities, the more he is aware of long-term liquidity risks, and likely to make cautious decisions to secure a sustainable development. At present, Vietnamese credit institutions are just beginning to build a risk management system based on international standards. Implementing Basel II means performing risk-based capital management, being a component of a bank's master business strategy, and therefore, it can change the bank's method of doing business as business decisions are based on risk assessments. The change requires the participation of not only the bank's risk management department, but also senior directors/managers, in its overall business strategy. That involves also all other teams, such as those of business, finance, IT, human resources, training, communications and operations... In reality, many banks's senior directors have not paid due attention to their projects of Basel II implementation. To realise the pathway of applying Basel II



and other standards on liquidity safety under Basel III, commercial banks, apart from the ten selected to implement Basel II, need to establish their own steering boards and capable task forces. Accordingly, the boards and forces can put the master plan into reality quickly, including the development of the above-mentioned liquidity management tools.

(v) *Improvement of the IT infrastructure, which is also a big challenge in implementing Basel II in Vietnam.* To fully and successfully implement the Basel II project, banks need to have modern, proper and integrated information technology system. They should build up their own reliable, accurate and high-quality information systems and databases. The requirement should be met right when the banks start to implement the project in order to collect, clarify, enrich and analyse data; narrow the gaps; connect, compare and input data in the system while meeting the requirements of standardising the data, the design of processes and the flexibility within the system so as to be able to amend and upgrade to Basel III when necessary. However, most of the banks in Vietnam have not yet met the requirements on data “thickness” (of at least five years) and IT databases. Thus, commercial banks should set up their own action plans to collect and complete their databases in line with Basel II requirements, and invest in developing proper IT systems for general requirements and for those of liquidity risk management in particular.

(vi) *Participation of independent rating agencies in defining risks of financial assets, transactions or partners, which is also required by Basel II implementation.*

In Vietnam so far, most of enterprises or financial assets are yet to be rated, so the country's banks find it difficult to assess and value their clients. The Basel II Accord entrusted regulators with considering and assessing whether banks are eligible to use their internal risk assessment systems to categorise and evaluate the clients' probabilities of bankruptcy. However, Vietnam's Bank Supervision Agency does not yet have enough capable and experienced staff to evaluate banks' risk assessment systems.

## Notes

<sup>1</sup> This paper was published in Vietnamese in: *Nghiên cứu Kinh tế*, số 10(473), 2017. Translated by Nguyen Hong Hanh, edited by Etienne Mahler.

<sup>2</sup> The Liquidity Coverage Ratio requires banks to maintain a sufficiency of high-quality assets which can be converted into cash to meet unexpected financial obligations within 30 days. The Net Stable Funding Ratio requires them to have financial sources available in the form of stable funding so as to cope with difficulties for a minimum period of one year. The latter equals to the available amount of stable funding divided by the required amount of stable funding, and the value shall be not less than 1.

<sup>3</sup> The Net Stable Funding Ratio has been applied in a number of countries since 2015.

<sup>4</sup> The ability-to-pay rate within 30 days under Circular No.06/2016-NHNN is calculated as follows:

$$\text{Ability-to-pay rate within 30 days} = \frac{\text{High liquid assets}}{\text{Cash outflow within next 30 days}} \times 100\%$$

<sup>5</sup> The loan-to-deposit ratio (LDR) is calculated as follows:  $\text{LDR} = (\text{L}/\text{D}) \times 100\%$ , in which, L is total loan outstanding balance, as stipulated in Clauses 2 and 3,

Article 21, Circular No.36/2014-NHNN;D: total deposits, as stipulated in Clause 4, Article 21, Circular No.36/2014-NHNN.

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