LIQUIDITY AND CAPITAL ANALYSIS OF STATE-OWNED BANKS IN INDONESIA BASED ON OJK REGULATIONS (POJK)

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Abstract: This study analyzes liquidity and capitalization based on the Financial Services Authority Regulation (POJK). Liquidity is measured by LCR and NSFR based on POJK Number 42/POJK.03/2015 concerning the obligation to fulfill the Liquidity Coverage Ratio (LCR) for Commercial Banks and POJK Number 50/POJK.03/2017 concerning the obligation to fulfill the Net Stable Funding Ratio (NSFR) for Commercial Banks. Capitalization is measured using the KPMM ratio according to the risk profile based on POJK Number 11/POJK.03/2016 concerning the obligation to provide minimum capital for Commercial Banks. The samples used in this study were state-owned banks listed on the Indonesia Stock Exchange, namely PT Bank Rakyat Indonesia Tbk (BBRI), PT Bank Mandiri Tbk (BMRI), PT Bank Negara Indonesia Tbk (BBNI), and PT Bank Tabungan Negara Tbk (BBTN). The data used are secondary data in the form of Bank annual reports, LCR calculation reports, and NSFR Reports for the 2019 to 2023 Period of each Bank. The four state-owned banks have LCRs of more than 100%. This indicates that the banks have highly liquid assets that are sufficient to handle a liquidity stress scenario within a 30-day period. The four state-owned banks have NSFRs of more than 100%. This indicates that the institutions have sufficient stable funding to meet funding needs for the next 12 months. The four state-owned banks have CARs that exceed the CAR limit based on the risk profile rating of each bank. The higher the CAR, the better the bank's ability to meet its financial obligations when under pressure

Keywords: liquidity; capital; LCR; NSFR; CAR; OJK Regulations

INTRODUCTION

Based on Law Number 7 of 1992 concerning Banking, as amended several times, most recently by Government Regulation in Lieu of Law Number 2 of 2022 concerning Job Creation, Banking is everything related to Banks, including institutions, business activities, and methods and processes in carrying out their business activities.

Changes in people's lifestyles in order to adapt to technological developments have also had a major impact on their financial behavior patterns. Currently, technological developments have caused many businesses to make maximum efforts to adapt, one of which is the Banking business. The Cashless trend among the Community has caused Banks to adopt several conveniences in digital Banking services. This of course has an impact on developments in the Banking industry.

As a financial institution trusted by the Community, the government always tries to ensure that Banks carry out their duties in accordance with applicable regulations. Banking supervision is carried out by assessing the Bank's health level. The Bank's health level can be interpreted as the Bank's ability to carry out activities to collect, manage, distribute funds, and fulfill obligations

to other parties normally and be able to fulfill all its obligations properly in ways that are in accordance with applicable Banking regulations (Kasmir, 2008).

The role of banking in accumulating public wealth generally requires a healthy financial condition and the availability of banking administration facilities that can attract open income. Currently, the development of world banking is increasingly rapid and modern. Banking increasingly dominates the economic and business growth of a country (Rahayu, Ruma, Anwar, & Sahabuddin, 2024).

Based on POJK Number 4 / POJK.03 / 2016 dated January 27, 2016 concerning the Assessment of the Health Level of Commercial Banks, Banks are required to conduct individual Bank Health Level assessments using a risk approach with a scope of assessment of factors such as risk profile, Good Corporate Governance (GCG), earnings, and capital.

Risk profile, Good corporate governance, Earnings, and Capital (RGEC) are methods in risk-oriented assessment. The RGEC method is a change in the previous Bank health level assessment method, namely CAMELS, CAMELS is regulated in Bank Indonesia Circular Letter No. 6/23/DPNP/2004 issued on May 31, 2004 concerning the implementation guidelines for the CAMELS method, and declared no longer valid since the issuance of Regulation No.13/1/PBI/2013 concerning the assessment of the health level of Commercial Banks (Sari & Tasman, 2020).

Based on POJK Number 4/POJK.03/2016, the assessment of risk profile factors is an assessment of the inherent risk and quality of risk management implementation in Bank operations which must be carried out on 8 (eight) risks, namely credit risk, market risk, liquidity risk, operational risk, legal risk, strategic risk, compliance risk, and reputation risk. The obligation to assess GCG factors is an assessment of Bank management regarding the implementation of GCG principles. The obligation to assess rentability factors includes an assessment of rentability performance, sources of rentability, and the Bank's earnings' sustainability. The assessment of capital factors includes an assessment of the level of capital adequacy and capital management.

This study analyzes liquidity and capitalization at Indonesian State-Owned Banks based on the Financial Services Authority Regulation (POJK). The liquidity ratios used are the Liquidity Coverage Ratio (LCR) and the Net Stable Funding Ratio (NSFR). Both ratios have two different but complementary objectives. The purpose of the LCR is to improve the short-term resilience of the bank's liquidity risk profile while the purpose of the NSFR is to reduce funding risk over a wider period of time (Canfranc, 2024). This liquidity assessment is based on POJK Number 42 / POJK.03 / 2015 concerning the obligation to fulfill the Liquidity Coverage Ratio (LCR) for Commercial Banks and POJK Number 50 / POJK.03 / 2017 concerning the obligation to fulfill the Net Stable Funding Ratio (NSFR) for Commercial Banks. The capital ratio used is KPMM (CAR) according to the risk profile. This is based on POJK Number 11 / POJK.03 / 2016 concerning the obligation to provide minimum capital for Commercial Banks. According to Hayes (2024), CAR is very important to ensure that banks have a large enough financial cushion to absorb a reasonable amount of losses before the bank goes bankrupt.

METHOD

The samples used in this study are state-owned banks listed on the Indonesia Stock Exchange, namely PT Bank Rakyat Indonesia Tbk (BBRI), PT Bank Mandiri Tbk (BMRI), PT Bank Negara Indonesia Tbk (BBNI), and PT Bank Tabungan Negara Tbk (BBTN). The data used are secondary data in the form of Bank Annual Reports, LCR Calculation Reports, and NSFR

Reports for the 2019 to 2023 Period which are available on the official website of each Bank. The following are the ratios used in this study.

Liquidity Coverage Ratio (LCR)

Liquidity Coverage Ratio is the proportion of highly liquid assets that a financial institution must have to meet its short-term obligations and overcome market disruptions. This is based on an international banking agreement called the Basel Accords. LCR is a product of the Basel Accords, developed by the Basel Committee on Banking Supervision (BCBS), which consists of 45 representatives from major financial centers around the world. One of its responsibilities is to set standards that will ensure that the banking system around the world remains solvent regardless of the pressures it faces. Banks should hold sufficient high-quality liquid assets to fund cash outflows for 30 days. High-quality liquid assets include only assets that can be easily and quickly converted into cash. Thirty days was chosen in the belief that governments and central banks would likely take action to rescue and stabilize the financial system within that time frame in the event of a serious financial crisis. Theoretically, having 30 days of cash reserves would allow a bank to survive a bank run until it occurs (Murphy, 2024). The formula for LCR is :

$$LCR = \frac{\text{HQLA}}{\text{NCO}}$$

Info :

HQLA = High Quality Liquid Asset is cash and/or financial assets that can be easily converted into cash with little or no reduction in value to meet the Bank's liquidity needs for the next 30 (thirty) days in a stress scenario.

NCO = Net Cash Outflow is the difference between the total estimated cash outflow and the total estimated cash inflow that is expected to occur for the next 30 (thirty) days in a stress scenario.

Net Stable Funding Ratio (NSFR)

Net Stable Funding Ratio (NSFR), which compares Available Stable Funding (ASF) (basically capital and liabilities with maturities greater than one year) to the amount of Required Stable Funding (RSF) that a bank must have based on the liquidity, maturity, and riskiness of its assets. A bank's NSF ratio must be at least 100%. The goal is to create an incentive for banks to fund their activities with more sustainable, stable funding sources rather than burdening their balance sheets with relatively cheap and abundant short-term wholesale funding (Gratton, 2024). The NSFR formula is:

$$NSFR = \frac{ASF}{RSF}$$

Info :

ASF = The ASF value calculated in the NSFR calculation is the sum of all the results of the multiplication of all the recorded values (carrying values) of liabilities and equity in the financial position report (balance sheet) with the ASF factor

RSF = The RSF value calculated in the NSFR calculation is the sum of all the results of the multiplication of all the recorded values (carrying values) of assets in financial position report and all administrative account transaction values in the commitment and contingency report with RSF factors.

Minimum Capital Adequacy Ratio (KPMM)

According to Dendawijaya (in Al Iqbal & Budiyanto, 2020), KPMM or Capital Adequacy Ratio (CAR) is a ratio that shows how far all Bank assets that contain risk (credit, participation, securities, bills on other Banks) are financed from the Bank's own capital funds, in addition to obtaining funds from sources outside the Bank, such as community funds, loans (debts), and others. CAR is a Bank performance ratio to measure the adequacy of capital owned by the Bank to measure the adequacy of capital owned by the Bank to support assets that contain or generate risk, for example credit provided. KPMM is an indicator of the bank's ability to cover the decline in its assets as a result of bank losses caused by risky assets. This ratio can be formulated as follows:

$$KPMM = \frac{\text{Owner's Equity}}{\text{ATMR}}$$

Info :

ATMR = assets whose calculations are carried out by assigning risk weights.

DISCUSSION

The Financial Services Authority Regulation regarding the obligation to fulfill the Liquidity Coverage Ratio (LCR) for Commercial Banks is regulated in POJK Number 42/POJK.03/2015. Fulfillment of liquidity adequacy as referred to in paragraph (1) is calculated using LCR. LCR is the comparison between High Quality Liquid Assets (HQLA) and total net cash outflows for the next 30 (thirty) days in a stress scenario. Fulfillment of LCR as referred to in paragraph (2) is set at a minimum of 100% (one hundred percent) on an ongoing basis. The following are the results of the calculation of LCR for Indonesian BUMN Banks for the period 2019 to 2023:

Table 1. *Liquidity Coverage Ratio* BUMN Indonesian Bank Period 2019-2023

No.	Bank Name	2023	2022	2021	2020	2019
1	BBRI	161,64%	199,72%	230,86%	256,21%	229,98%
2	BMRI	176,24%	191,02%	200,56%	217,53%	181,43%
3	BBNI	175,36%	207,61%	231,71%	218,70%	163,15%
4	BBTN	190,24%	238,50%	283,16%	256,32%	136,31%

Source: data processing results (2024)

Based on the data in table 1, the four state-owned banks have an LCR of more than 100%. According to the Basel Accord, every bank must have an LCR of at least 100% to pass the stress test. This indicates that the bank has highly liquid assets that are sufficient to handle a liquidity stress scenario within a 30-day period. According to the Basel III Accord, every bank is required to have an LCR higher than 100%. A higher LCR is usually better because it indicates a better ability of the bank to meet its short-term liquidity needs.

The Financial Services Authority Regulation regarding the obligation to fulfill the Net Stable Funding Ratio (NSFR) for Commercial Banks is regulated in POJK Number 50 / POJK.03 / 2017. Banks are required to maintain adequate stable funding. Fulfillment of stable funding as referred to in paragraph (1) is calculated using NSFR. NSFR is the comparison between ASF and RSF. Fulfillment of NSFR as referred to in paragraph (2) is set at a minimum of 100% (one hundred percent). LCR and NSFR measure two different risks. LCR is used to assess a bank's short-term liquidity needs and NSFR is used to assess its long-term funding stability.

.**Table 2. *Net Stable Funding Ratio* BUMN Indonesian Bank Period 2019-2023**

No.	Bank Name	2023	2022	2021	2020	2019
1	BBRI	135,17%	142,24%	136,83%	149,06%	136,17%
2	BMRI	116,59%	119,93%	126,20%	126,10%	116,56%
3	BBNI	146,40%	165,70%	151,80%	143,68%	141,06%
4	BBTN	122,75%	132,21%	130,98%	130,71%	108,29%

Source: data processing results (2024)

Based on the data in table 2, the four state-owned banks have an NSFR of more than 100%. According to the Basel III Accord issued by the Basel Committee on Banking Supervision (BCBS), every bank is required to have a minimum NSFR of 100%. This shows that the institution has funding that is stable enough to meet funding needs for the next 12 months. According to Sia Partners (2020), NSFR is designed to address liquidity mismatches by providing incentives to banks to use stable funding sources for their long-term assets and avoid over-reliance on short-term funding as has been observed.

Financial Services Authority Regulations regarding Minimum Capital Requirements for Commercial Banks are regulated in POJK Number 11 /POJK.03/2016. Banks are required to provide minimum capital according to their risk profile. The minimum capital provision as intended in paragraph (1) is calculated using the Minimum Capital Requirement (KPMM) ratio.

Table 3. Minimum Capital Provision Based on Risk Profile Rating

Risk Profile Rating	KPMM
1	8%
2	9% s.d. <10%
3	10% s.d. <11%
4 and 5	11% s.d. <14%

Source : POJK Num. 11 /POJK.03/2016

The following is the KPMM ratio according to the risk profile of Indonesian BUMN Banks from 2019 to 2023.

Table 4. KPMM Ratio According to Risk Profile of PT Bank Rakyat Indonesia Tbk (BBRI) 2019 to 2023

Period	Risk Profile Rating	KPMM Standard	KPMM	Results
2019	2	9% s.d. <10%	9,00%	According to the standard
2020	2	9% s.d. <10%	9,50%	According to the standard
2021	2	9% s.d. <10%	9,60%	According to the standard
2022	2	9% s.d. <10%	9,47%	According to the standard
2023	2	9% s.d. <10%	9,48%	According to the standard

Sumber : hasil olah data (2024)

The Company's compliance risk profile is at a composite rating of 2 (Low to Moderate). BRI's minimum total CAR based on the risk profile is at level 9 to <10%, so BRI's CAR in 2019 to 2023 is able to be above the minimum provisions set by the banking and financial services regulator.

Table 5. KPMM Ratio According to Risk Profile of PT Bank Mandiri Tbk (BMRI) 2019 to 2023

Period	Risk Profile Rating	KPMM Standard	KPMM	Results
2019	2	9% s.d. <10%	9,59%	According to the standard
2020	2	9% s.d. <10%	9,83%	According to the standard
2021	2	9% s.d. <10%	9,75%	According to the standard
2022	2	9% s.d. <10%	9,86%	According to the standard
2023	1	8%	9,76%	According to the standard

Source: data processing results (2024)

The results of Bank Mandiri's risk profile self-assessment in 2019 to 2022 are ranked 2nd and in 2023 are ranked 1st (Very Low). Bank Mandiri's minimum total CAR based on the risk profile for 2019 to 2022 is in the range of 9% to <10% while the minimum total CAR based on the risk profile in 2023 is above 8% which means it is above the minimum provisions set. Bank Mandiri's Risk Profile Assessment throughout 2023 reflects that the risks faced by Bank Mandiri can be managed well so that they can support further business development. In other words, Risk Management has been implemented by Bank Mandiri well and effectively.

Table 6. KPMM Ratio According to Risk Profile of PT Bank Negara Indonesia Tbk (BBNI) 2019 to 2023

Period	Risk Profile Rating	KPPM Standard	KPMM	Results
2019	2	9% s.d. <10%	9,95%	According to the standard
2020	2	9% s.d. <10%	9,95%	According to the standard
2021	2	9% s.d. <10%	9,75%	According to the standard
2022	2	9% s.d. <10%	9,80%	According to the standard
2023	2	9% s.d. <10%	9,80%	According to the standard

Source: data processing results (2024)

BNI's risk profile is ranked 2 (Low to Moderate), the KPMM or CAR ratio is in the range of 9% to <10% which means it has exceeded the minimum limit that has been determined.

Table 7. KPMM Ratio According to Risk Profile of PT Bank Tabungan Negara Tbk (BBTN) 2019 to 2023

Period	Risk Profile Rating	KPPM Standard	KPMM	Results
2019	2	9% s.d. <10%	9,18%	According to the standard
2020	2	9% s.d. <10%	9,25%	According to the standard
2021	2	9% s.d. <10%	9,25%	According to the standard
2022	2	9% s.d. <10%	9,40%	According to the standard
2023	2	9% s.d. <10%	9,18%	According to the standard

Source: data processing results (2024)

BTN's risk profile is ranked 2 (Low to Moderate), the KPMM or CAR ratio is in the range of 9% to 10% which means it has exceeded the specified minimum limit. The higher the CAR, the better the bank's ability to meet its financial obligations when under pressure. A high CAR ratio is a financial resource that can be used to build a business and protect against risks or potential losses arising from providing credit (Wetapo, Elisa, & Purnamasari, 2023).

CONCLUSION

1. The four state-owned banks have LCRs of more than 100%. This indicates that the banks have highly liquid assets that are sufficient to handle liquidity stress scenarios within a 30-day period.
2. The four state-owned banks have NSFRs of more than 100%. This indicates that the institutions have sufficient stable funding to meet funding needs for the next 12 months.
3. The four state-owned banks have KPMM ratios exceeding the KPMM limit based on the risk profile rating of each bank. The higher the CAR, the better the bank's ability to meet its financial obligations when under pressure

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