

## Financial Ratio Analysis to Measure the Financial Performance of the Banking Sector in Indonesia

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### Abstract

*The purpose of this study is to analyze the ratio of liquidity, solvency, and activity for the measurement of financial performance. The data analysis method is comparative descriptive analysis. The bank financial statements then analyzed the liquidity, solvency, activity, and profitability for comparison of results in each year and will be adjusted to Bank Indonesia (BI) standard that can be analyzed to measure the financial level and performance of the bank. While the data source used in this study is secondary data in the form of bank financial statement documents from 2015 to 2019 obtained from the website www.IDX.co.id. The results show bank liquidity can meet the short term on time. The result of solvency is seen as the ability of a bank in fulfilling and keep its ability to always fulfill its obligation in paying the debt on time. The profitability of banks has a good ratio.*

### Keywords

analysis; financial ratios;  
financial performance



### I. Introduction

Banking is a public trust financial institution that plays an important role in the economic system, so it can be said that banks are the lifeblood of the financial system. Banks become the lifeblood of the financial system because it takes an important role, namely being a business entity that collects funds from the community in the form of deposits such as savings, current accounts, deposits, and others. Funds collected from the community are channeled back to the community in the form of credit aimed at improving the standard of living of many rakyat (Indonesian Bankers Association, 2014).

Banks have the same business goal as other companies, namely for profit. The existence of a bank must be useful and can be felt directly by anyone. The need for bank services is very necessary both for business people and non-business actors.

Today the term effective and ineffective bank financial performance is increasingly popular. Various actual events about banking such as mergers and liquidations have always been associated with the health of banks. Performance can describe the results that the bank has achieved in a given period. Financial performance is important in measuring the success of the business that is run. The performance also serves as a reflection of the bank's ability to manage its resources. Classical economists argue that a company's responsibility is to increase its value to its shareholders (Friedman, 1970). In line with this view, the main goal of most companies is to increase business profits. In achieving business profits should be able to run effectively without sacrificing stakeholders and the community as a whole.

In assessing the financial performance of banks, an analysis is needed to find out the conditions after conducting their operational activities within a certain time. Analysis was conducted in the form of an assessment of the level of effectiveness of the bank's financial performance.

It can be explained that financial performance is an analysis conducted to find out the extent to which the company has implemented the rules that have been set related to the proper and correct use of finance (Fahmi, 2017).

To assess the level of effectiveness of the bank's financial performance can be seen from the financial statements presented by the management. The increase in the value of the company's shares, the higher the company value, the higher it will be (Katharina, 2021). In the current economic development, manufacturing companies are required to be able to compete in the industrial world (Afiezan, 2020). The existence of the company can grow and be sustainable and the company gets a positive image from the wider community (Saleh, 2019). According to Yunita and Waruwo, customer loyalty is a form of customer loyalty to the satisfaction that has been felt at every time shopping so as to foster a sense of loyalty and become a regular customer. (Mella & Waruwu in Harahap, 2021). Customer loyalty can occur after the customer is satisfied, and customers will feel satisfied if they get the best service quality (Rizal Zulkarnain, et. Al, in Marliyah, 2021). The customer value can be triggered by some factors related to association, i.e. marketing and individual environment, which provide support or motivation to use the service as expected (Kusumadewi, 2019). According to Priansa in Nusjirwan, 2020) "Implementation of communication activities to customers within the company is carried out formally, however, currently there are also companies that practice their communication activities to consumers in an informed manner so that they can explore in-depth information from customers". The financial statements consist of a Balance Sheet, Income Statement, and Equity Change Statement. Analysis of banking financial statements can help business people, both the government and other users of financial statements in assessing the performance of a bank.

However, the financial statements that have been prepared do not guarantee the obtaining of information about the company's performance, without further study and analysis. According to Maith (2013), financial statement analysis is a process of parsing financial statement posts into smaller units of information and seeing relationships that are significant or meaningful between quantitative data and non-quantitative data to know financial conditions more deeply which is very important in the process of making the right decision.

## **II. Research Methods**

Bank BUKU is a banking term referring to the type of bank that exists in Indonesia. The existence of this type of bank is regulated by Bank Indonesia Number 14/26/PBI/2012 on Business Activities and Office Networks based on The Bank's Core Capital. The rule was then updated by the Financial Services Authority Number 6/POJK.03/2016 on Business Activities and Office Networks based on the Bank's Core Capital. As contained in both rules, the definition of Bank BUKU is commercial banks that are grouped based on business activities and the amount of core capital. From that definition, the term Commercial Bank appears based on Business Activities.

Types of BUKU Banks in Indonesia:

1. BANK BUKU 1: Types of banks with core capital of less than 1 trillion.
2. Bank BUKU 2: Types of banks with core capital of Rp 1-5 trillion
3. Bank BUKU 3: Type of Bank with core capital of Rp 5-30 trillion
4. Bank BUKU 4: Types of Banks with core capital of more than Rp30 trillion

In this study, the authors examined several Bank BUKU 4, namely: PT Bank Central Asia, Tbk. PT Bank Rakyat Indonesia, Tbk. PT Bank Negara Indonesia, Tbk. and PT Bank Mandiri, Tbk

Fred Weston mentions that the liquidity ratio is a ratio that describes a company's ability to meet short-term obligations. In Bank Indonesia Circular Letter 6/23/DPNP/2004, it is explained the LDR component rating, as follows:

1. Rank 1, between 50%-75%
2. Rank 2, between 75%-85%
3. Rank 3, between 85%-100%
4. Rank 4, between 100%-120%
5. Ranked 5th, over 120%

It can be declared healthy if the LDR is ranked 3rd (PK-3) and above. The lower the value of the ratio, the bank's ratio value is very good.

The formula for finding a Loan to Deposit Ratio is as follows:

$$LDR = \frac{\text{Kredit yang Diberikan}}{\text{Dana yang Diterima}} \times 100\%$$

The solvency ratio is the ratio used to measure the extent to which a company's assets are financed with debt. The solvency ratio of a bank is a measure of a bank's ability to find sources of funds to finance its activities. In bank Indonesia Circular Letter No.6/23/DPNP/2004 described the car component rating as follows:

1. Ranked 1st, over 11%
2. Rank 2, between 9.5%-11%
3. Rank 3, between 8%-9.5%
4. Rank 4, between 6.5%-8%
5. Rank 5, less than 6.5%

It can be declared healthy if CAR is ranked 3rd (PK-3) and above. The higher the value of the ratio, the value of the bank ratio is very good. The formula for finding a capital adequacy ratio is as follows:

$$CAR = \frac{\text{Total Capital}}{\text{ATMR}} \times 100\%$$

Activity Ratio is a ratio used to measure the effectiveness of a company is using its assets. Activity ratios are also used to assess a company's ability to carry out daily activities. The formula for finding total asset turnover is as follows:

$$TATO = \frac{\text{Sale}}{\text{Total Assets}} \times 100\%$$

### III. Discussion

#### 3.1 Rasio Liquidity

##### a. Loan to Deposit Ratio (LDR)

**Table 1.** LDR PT Bank Central Asia, Tbk

YEAR	CREDIT	THIRD-PARTY FUNDS	LDR
2015	252.761	422.172	59,87%
2016	306.679	471.818	65,00%
2017	339.859	523.632	64,90%
2018	378.616	563.291	67,21%
2019	403.391	642.849	62,75%

Source: www.BCA.co.id

**Table 2.** LDR PT Bank Negara Indonesia, Tbk

YEAR	CREDIT	THIRD-PARTY FUNDS	LDR
2015	200.742	301.186	66,65%
2016	250.638	339.574	73,81%
2017	277.622	374.914	74,05%
2018	326.105	448.858	72,65%
2019	393.275	524.799	74,94%

Source: www.bni.co.id

**Table 3.** LDR PT Bank Rakyat Indonesia, Tbk

YEAR	CREDIT	THIRD-PARTY FUNDS	LDR
2015	362.007	515.048	70,29%
2016	448.345	583.855	76,79%
2017	510.697	720.028	70,93%
2018	581.095	782.122	74,30%
2019	663.420	901.339	73,60%

Source: www.bri.co.id

Table 1 shows that having an LDR in 2015 was 59.87%, in 2016 by 65.00%, in 2017 by 64.90%, in 2018 by 67.21%, and in 2019 by 62.75%. Table 2 shows that PT. Bank Negara Indonesia, Tbk. TLDR in 2015 amounted to 66.65%, in 2016 by 73.81%, in 2017 by 74.05%, in 2018 by 72.65%, and in 2019 by 74.94%. Table 3 shows that PT. Bank Rakyat Indonesia, Tbk has an LDR in 2015 of 70.29%, in 2016 of 76.79%, in 2017 of 70.93%, in 2018 of 74.30%, and 2019 of 73.60%.

**Table 4.** LDR PT Bank Mandiri, Tbk

YEAR	CREDIT	THIRD-PARTY FUNDS	LDR
2015	388.830	558.670	69,60%
2016	472.435	645.133	73,23%
2017	529.974	741.227	71,50%
2018	595.458	795.879	74,82%
2019	662.013	915.871	72,28%

Source: www.mandiri.co.id

In table 4 shows that PT Bank Mandiri, Tbk had an LDR in 2015 of 69.60%, in 2016 by 73.23%, in 2017 amounting to 71.50%, in 2017 by 74.82%, and in 2019 by 72.28%. From the results of calculations, the liquidity ratio of banking companies listed on the Indonesia Stock Exchange shows the ability to generate profits that increase along with increased lending. In addition, the bank's liquidity results can also be declared healthy following BI standards.

## **b. Solvency Ratio**

### **Capital Adequacy Ratio (CAR)**

**Table 5.** CAR PT Bank Central Asia, Tbk

YEAR	EQUITY	ATMR	CAR
2015	51.898	315.124	16,47%
2016	62.332	365.510	17,05%

2017	75.726	411.666	18,40%
2018	89.625	483.083	18,55%
2019	112.715	517.790	21,77%

Source: [www.bca.co.id](http://www.bca.co.id)

Table 5 shows that PT Bank Central Asia, Tbk had CAR in 2015 at 16.47%, in 2016 by 17.05%, in 2017 at 18.40%, in 2018 by 18.55%, and in 2019 by 21.77%.

**Table 6.** CAR PT. Bank Negara Indonesia, Tbk

YEAR	EQUITY	ATMR	CAR
2015	43.525	246.885	17,63%
2016	47.684	300.941	15,84%
2017	61.021	323.130	18,88%
2018	78.438	393.221	19,95%
2019	89.254	453.078	19,70%

Source: [www.bni.co.id](http://www.bni.co.id)

**Table 7.** CAR PT Bank Rakyat Indonesia, Tbk

YEAR	EQUITY	ATMR	CAR
2015	64.882	325.352	19,94%
2016	79.574	408.858	19,46%
2017	97.706	468.182	20,87%
2018	113.127	560.079	20,20%
2019	146.813	648.969	22,62%

Source: [www.bri.co.id](http://www.bri.co.id)

**Tabel 8.** CAR PT Bank Mandiri, Tbk

YEAR	EQUITY	ATMR	CAR
2015	75.756	400.190	18,93%
2016	88.791	491.276	18,07%
2017	104.845	514.905	20,36%
2018	119.492	577.346	20,70%
2019	153.370	643.379	23,84%

Source: [www.mandiri.co.id](http://www.mandiri.co.id)

In table 7 shows that PT Bank Negara Indonesia, Tbk had CAR in 2015 at 17.63%, in 2016 by 15.84%, in 2017 by 18.88%, in 2018 by 19.95%, and in 2019 by 19.70%.

In table 8 shows that PT Bank Rakyat Indonesia, Tbk had CAR in 2015 at 19.94%, in 2016 by 19.46%, in 2017 by 20.87%, in 2018 by 20.20%, and in 2019 by 22.62%.

In table 8 shows that PT Bank Mandiri, Tbk had CAR in 2015 at 18.93%, in 2016 by 18.07%, in 2017 by 20.36%.

The calculation of the solvency ratio from banking companies showed an increase due to the increase in ATMR compared to the capital owned. The greater the percentage, the better at showing the ability of capital to cover the possibility of credit failure.

### c. Activity Ratio

Total Assets Turn Over (TATO)

**Table 9.** TATO PT Bank Central Asia, Tbk

<b>YEAR</b>	<b>SALES</b>	<b>TOTAL ASSETS</b>	<b>TATO</b>
2015	28.092	442.994	6,34%
2016	34.622	496.849	6,97%
2017	41.373	553.156	7,48%
2018	47.876	594.373	8,05%
2019	53.779	676.739	7,95%

Source: *www.bca.co.id*

**Table 10.** TATO PT Bank Negara Indonesia, Tbk

<b>YEAR</b>	<b>SALES</b>	<b>TOTAL ASSETS</b>	<b>TATO</b>
2015	22.971	333.304	6,89%
2016	27.411	386.655	7,09%
2017	31.747	416.574	7,62%
2018	35.258	508.595	6,93%
2019	41.299	603.032	6,85%

Source: *www.bni.co.id*

**Table 11.** TATO PT Bank Rakyat Indonesia, Tbk

<b>YEAR</b>	<b>SALES</b>	<b>TOTAL ASSETS</b>	<b>TATO</b>
2015	80.983	551.337	14,69%
2016	96.397	626.101	15,40%
2017	111.938	801.984	13,96%
2018	130.172	878.426	14,82%
2019	152.164	1.003.644	15,16%

Source: *www.bri.co.id*

Table 9 shows that PT Bank Central Asia, Tbk had TATO in 2015 at 6.34%, in 2016 by 6.97%, in 2017 by 7.48%, in 2018 by 8.05%, and in 2019 by 7.95%. In table 10 shows that PT Bank Negara Indonesia, Tbk. has TATO in 2015 by 6.89%, in 2016 by 7.09%, and in 2019 by 6.85%.

In table 11 shows that PT Bank Rakyat Indonesia, Tbk has TATO in 2015 at 14.69%, in 2016 by 15.40%, in 2019 by 15.16%.

**Table 12.** TATO PT Mandiri, Tbk

<b>YEAR</b>	<b>SALES</b>	<b>TOTAL ASSETS</b>	<b>TATO</b>
2015	80.983	551.337	14,69%
2016	96.397	626.101	15,40%
2017	111.938	801.984	13,96%
2018	130.172	878.426	14,82%
2019	152.164	1.003.644	15,16%

Table 12 shows that PT Bank Mandiri, Tbk has TATO in 2015 at 14.69%, in 2016 it was 15.40%, and in 2019 it was 15.16%. The results of the calculation of the activity ratio of Bank BUKU 4 above show an increase. This increase means that banks are working more efficiently and liquidly. The smaller this ratio, the worse, the greater this ratio, the better.

## IV. Conclusion

### 4.1 Conclusion

Based on the results of the analysis, the liquidity ratio can be concluded that the average loan to deposit ratio (LDR) of the company in 2015 to 2019, which has the best liquidity level is PT Bank Central Asia, Tbk at 63.95%, the second is PT Bank Mandiri, Tbk at 72.29%, the third is PT Bank Negara Indonesia, Tbk at 72.42%, The fourth is PT Bank Rakyat Indonesia, Tbk at 73.18%. And the liquidity ratio of banks listed on the Indonesia Stock Exchange can be declared healthy because it is following BI standards.

Liquidity, solvency, and activity ratios were analyzed in the study to measure the financial performance of the banking sector. The study measured banking financial performance using comparative descriptive analysis methods. The focus of the study is to analyze the financial ratios in the Financial Statements to get a comparison of results in each year adjusted to Bank Indonesia (BI) standards to measure the financial condition and performance of the bank.

The data source used in the study is secondary data in the form of banking financial statement documents from 2015 to 2019 obtained from [www.IDX.co.id](http://www.IDX.co.id). The results showed the bank's liquidity was able to meet its short-term obligations on time. Solvency results show the bank's ability to meet and maintain its ability to resolve its responsibilities in making debt payments on time. The results of the analysis of the activity ratio showed that banks use their resources to the maximum. The results of the analysis showed the bank has a good profitability ratio.

Solvency Ratio can be concluded the average capital adequacy ratio (CAR) of the company in 2015 to 2019, which has the best solvency rate is PT Bank Rakyat Indonesia, Tbk at 20.62%, the second is PT Bank Mandiri, Tbk at 20.38%, the third is PT Bank Central Asia, Tbk. at 18.45%, the fourth is PT Bank Negara Indonesia, Tbk at 18.40%. From the results of the solvency ratio analysis, the bank was declared healthy.

The Activity Ratio can be concluded the average yield of the company's total asset turnover (TATO) in 2015 to 2019, which has the best activity levels PT. Bank Rakyat Indonesia, Tbk amounted to 14.80%, the second is PT. Bank Mandiri, Tbk amounted to 10.83%, the third is PT. Bank Central Asia, Tbk amounted to 7.36%, the fourth was PT. Bank Negara Indonesia, Tbk by 7.08%.

Overall based on the analysis of financial statements from 2015 to 2019, the company that has the best financial performance is PT Bank Rakyat Indonesia, Tbk, the company that has the second-best financial performance is PT. Bank Central Asia, Tbk, the company that has the third-best financial performance is PT Bank Mandiri, Tbk.

### 4.2 Suggestion

This study only used three ratios in measuring banking performance, so researchers should be able to use more ratios in measuring performance. One factor that is considered to affect employee performance is organizational Commitment (Edward, 2020). Affective commitment came from emotional or psychological attachment with the organization (Syakur, 2020). In addition to increasing the ratio in measuring performance, the author also suggests that you should look for other and latest methods to get more accurate analysis results.

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