

## **The Effect of Current Ratio, Debt to Asset Ratio, and Return on Assets on Price to Book Value in Non-Bank Companies in the LQ45 Index Listed on the Indonesian Stock Exchange from 2019 to 2023**

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### **Abstract**

This study aims to analyze the effect of Current Ratio, Debt to Asset Ratio, and Return on Assets on Price to Book Value (PBV) in non-bank companies listed in the LQ45 index on the Indonesia Stock Exchange during 2019–2023. Using a quantitative approach with panel data regression and a purposive sampling technique, the study selected 35 non-bank companies as samples, resulting in 175 observations. The data analysis used the Fixed Effect Model, with classical assumption testing and hypothesis testing through t-test, F-test, and the coefficient of determination (Adjusted  $R^2$ ). The results showed that individually, Current Ratio, Debt to Asset Ratio, and Return on Assets did not significantly affect Price to Book Value. However, simultaneously, the three variables significantly influenced PBV. The Adjusted  $R^2$  value of 22.01% indicates that the model explains a moderate portion of the variation in PBV, while the rest is influenced by other factors not included in the model. These findings provide insight for investors and companies regarding the financial ratios' roles in determining firm value.

**Keywords:** Current Ratio; Debt to Asset Ratio; Return on Assets; Price to Book Value; Non-Bank Companies; LQ45; Indonesia Stock Exchange

### **INTRODUCTION**

The global economy is experiencing deteriorating conditions marked by declining economic growth rates (Dillon, 2015; Mason & Lee, 2022; McDaniel, 2018; Phillips et al., 2014; Ushakov et al., 2019). In Indonesia, significant development and growth have been observed in recent years, as evidenced by the increasing number of people engaging in trade, including investment activities. Investing has become a trend among the public, as the prospects of investing are highly promising for investors (Ahmad, 2024; Milton et al., 2021; Polishchuk et al., 2022; Vovchak et al., 2022; Ye et al., 2023). The purpose of investing is to generate future profits. One form of investment that has attracted a significant number of investors, both local and foreign, is stock investment. Investment is an activity that requires a commitment to allocate capital, either directly or indirectly, with the expectation of generating profits from the results of the capital allocation and the hope of selling it back at a higher value than the purchase price (Cohen et al., 2021; Dang & Pheng, 2015; Katariya & Shukla, 2022; Milton et al., 2021; Nuradi & Fatimah, 2015). One of the investment institutions that plays a role in Indonesia's economic growth is the capital market. With the existence of the capital

market, the public has the opportunity to invest easily, thereby increasing income and driving economic growth. When investing in the capital market, it is necessary to consider accurate information, such as understanding the extent to which variables are closely related to the fluctuations in the prices of the companies being purchased.

The *LQ45* Index is the market capitalization value of the 45 most liquid stocks with large market capitalization, which serves as an indicator of liquidity. The *LQ45* Index uses 45 stocks selected based on trading liquidity and is adjusted every six months (at the beginning of February and August). As a result, the stocks included in the index will always change. The stocks included in *LQ45* are continuously monitored, and a review is conducted every six months (at the beginning of February and August).

The reason researchers chose the *LQ45* Index is because of its liquidity and market capitalization, as the *LQ45* Index consists of 45 stocks with high liquidity and large market capitalization, supported by strong company fundamentals (Indonesia Stock Exchange, 2022). These stocks are the most actively traded and have larger transaction volumes. This provides an advantage for investors seeking ease in buying and selling stocks without significantly impacting market prices (OJK, 2021). Similarly, the *IDX80* includes 80 stocks with similar characteristics. However, the *LQ45* is considered more exclusive due to the smaller number of stocks, making it easier for investors to monitor and analyze their performance (Prasetyo and Suryandari, 2020).

One of the objectives of a company is to maximize shareholder welfare by maximizing company value (Putri et al., 2024). Company value can be seen as an investor's perception of the company. Investors use company value as a benchmark to measure a company's performance in the coming period. One of the methods that investors use to measure company value is *Price to Book Value* (PBV). The reason for choosing *Price to Book Value* rather than Tobin's Q is that PBV is more commonly used and, compared to Tobin's Q, is simpler, easier to calculate, and requires data that is more easily accessible. *Price to Book Value* is obtained by comparing the company's stock price with its book value per share, thus requiring only market data and publicly available financial statements (Brigham and Houston, 2010). Meanwhile, Tobin's Q compares the market value of a company's assets with the replacement cost of those assets, which is difficult to measure accurately because it requires estimates of replacement costs that are often not directly available (Damodaran, 2002). Additionally, PBV is more commonly applied in investment practice because it provides an indication of whether a company's stock is overvalued or undervalued relative to its book value. Therefore, many studies in Indonesia prefer PBV as an indicator of company value due to its suitability with available data (Kuncoro and Suhardjanto, 2012).

The PBV of each public company—or company that has sold shares to the public—can be reflected through the company's performance as seen in its publicly published financial statements. A company's ability to meet its current obligations also influences investor interest in allocating funds, which is crucial for maintaining the company's performance. In addition, when investing, an investor also pays attention to the company's capital structure. A good capital structure indicates that a company is able to find a balance between the benefits and costs of using debt (Wardani & Dewi, 2016).

Several factors influence changes in PBV. The first factor is the *Current Ratio*. The reason for choosing *Current Ratio* over *Cash Ratio* is that the *Current Ratio* calculates all current assets (cash, accounts receivable, inventory, etc.), while the *Cash Ratio* only calculates cash and cash equivalents. The *Current Ratio* is also chosen because it provides a more realistic

and comprehensive picture of a company's ability to meet short-term obligations (Brigham and Houston, 2010). This differs from the *Cash Ratio*, which only considers cash and cash equivalents, making it an overly conservative measure that often does not reflect a company's actual liquidity (Ross et al., 2013).

The *Current Ratio* is one component of liquidity ratios. Gitman (2012) states that liquidity refers to a company's ability to quickly convert assets into cash to meet its financial obligations. The *Current Ratio* is the most commonly used measure to assess a company's ability to meet its short-term obligations and indicates how well short-term creditors' demands can be met by assets. The *Current Ratio* is calculated by comparing total current assets with current liabilities (Pandyanto et al., 2021).

The second factor affecting PBV is the *Debt to Asset Ratio* (DAR). The reason for choosing DAR over the *Debt to Equity Ratio* (DER) is that DAR provides a more comprehensive picture of a company's capital structure. DAR indicates the proportion of assets financed by debt, thereby reflecting the company's ability to meet long-term obligations using all of its assets (Brigham and Houston, 2010). DAR is more stable because it is not affected by fluctuations in equity value due to losses, dividends, or accounting adjustments (Gitman and Zutter, 2012). Conversely, DER may be unrepresentative, especially if the company's equity is small or negative, which can cause the DER value to become disproportionately high. Therefore, in the context of solvency—which focuses on a company's ability to survive in the long term and repay its long-term debts—DAR is considered a more relevant and reliable indicator (Horne and Wachowicz, 2009).

The *Debt to Asset Ratio* is one part of the solvency ratio. Solvency ratios measure a company's ability to pay all of its liabilities, both short-term and long-term (Febriani, 2020). DAR measures the ratio between total debt and total assets (Pandyanto et al., 2021).

The third factor affecting PBV is *Return on Assets* (ROA). The reason for choosing ROA over *Return on Equity* (ROE) is that in profitability analysis, ROA provides a more comprehensive picture of the efficiency of using all company assets to generate profits. ROA measures a company's ability to generate profits from its total assets, without considering the structure of debt or equity financing (Brigham and Houston, 2010). This makes it a more objective tool for assessing a company's pure operational performance. Meanwhile, ROE only measures profit relative to shareholders' equity, which can be distorted if the company has high debt, as leverage can increase ROE without reflecting improvement in operational efficiency (Gitman and Zutter, 2012).

ROA is one component of profitability ratios. Profitability ratios measure a company's ability to earn profits or the effectiveness of its management. ROA is used to measure the ability of capital invested in total assets to generate net income (Febriana, 2020).

A high PBV is more attractive to investors because it reflects that the company has good performance and strong prospects for providing returns to shareholders. Companies must manage their businesses optimally and pay attention to factors that can affect company value in order to increase it (Heng et al., 2023). PBV indicates whether a stock's market price is considered expensive or inexpensive by comparing its market value to its book value. A high PBV suggests that the company has successfully created value for all shareholders (Kusumaningrum et al., 2022).

Previous studies have examined the influence of liquidity, capital structure, and profitability on firm value, yet the results remain inconsistent. For instance, Kuncoro and Suhardjanto (2012) found that *Current Ratio* and DAR had a significant positive effect on PBV

in manufacturing companies in Indonesia, whereas Wardani and Dewi (2016) found that in non-financial companies, DAR and ROA did not always align with PBV, and in some cases, there were negative relationships that contradicted classical theories of liquidity, solvency, and profitability. These differing outcomes indicate a research gap regarding the consistency of financial ratios' influence on firm value in non-bank sectors, particularly for companies included in the *LQ45* Index, which have high liquidity and market capitalization and are primary references for investors.

Based on the background described above, there is a phenomenon where fluctuations in the *Current Ratio*, DAR, and ROA on PBV are not in line with existing theory. Previous research results show that the variables used have different directions of relationship to PBV. Therefore, the objective of this study is to analyze the contribution of liquidity, capital structure, and profitability to PBV both simultaneously and partially, while its benefits include offering managerial insights to optimize financial management to increase firm value, as well as assisting investors in making more informed and data-driven investment decisions.

### RESEARCH METHODS

Research methods are scientific approaches used to generate data for specific purposes and applications (Sugiyono, 2017:2). This study utilizes numerical data and statistical analysis, thereby employing a quantitative research approach. The quantitative method is based on the philosophy of positivism and is used to study a specific population or sample, collect data using research instruments, and analyze quantitative/statistical data with the aim of testing pre-established hypotheses (Sugiyono, 2017:8).

#### Population and Sample

The population is a generalization area consisting of objects or subjects that have certain quantities and characteristics determined by the researcher to be studied, from which conclusions can then be drawn (Sugiyono, 2013:80). In this study, the population consists of non-bank companies listed in the *LQ45* index of the Indonesia Stock Exchange from 2019 to 2023, totaling 56 companies.

A sample is a subset of the number and characteristics possessed by a population (Sugiyono, 2013:81). The sampling technique used in this study is the non-probability sampling method. *Non-probability sampling* is a sampling technique that does not give every element or member of the population an equal chance to be selected as a sample. This sampling method includes systematic sampling, quota sampling, accidental sampling, purposive sampling, saturation sampling, and snowball sampling. This study employs *purposive sampling*, which is a technique for selecting samples based on specific considerations (Sugiyono, 2013:85). The criteria used are as follows:

**Table 2. Sample Criteria**

Population	Non-bank companies in the LQ45 index on the Indonesia Stock Exchange (2019-2023)	56 Companies
	Non-bank companies that do not have financial statement data with a range that is too far from the LQ45 index.	4 Companies
Non-Criteria	Non-bank companies that are not listed on the LQ45 index consecutively (2019-2023).	7 Companies

Non-bank companies that do not report complete and consistent financial statements or financial ratios during 2019-2023.	10 Companies
<b>Total sample</b>	<b>35 Companies</b>
<b>Total observations (35 x 5)</b>	<b>175 Companies</b>

data used by the author in this study was obtained from the financial reports of companies listed on the Indonesia Stock Exchange for the period 2019-2023.

### **Data Collection Techniques**

Data collection can be carried out using various methods, including observation, interviews, questionnaires, documentation, and triangulation or a combination thereof (Sugiyono, 2019:194). In this study, the researcher used the *documentation* data collection technique. In this technique, the researcher sought data and explanations regarding events that had already occurred, specifically in the form of the financial reports of companies listed on the *LQ45* index for the period 2019–2023, which had been published on the official website of the Indonesia Stock Exchange (*Bursa Efek Indonesia* – BEI). Additionally, the data collection process was supported by information obtained from internet sources to facilitate data acquisition and strengthen the research process in achieving its objectives.

### **Data Analysis Techniques**

In this study, data analysis was conducted using multiple regression analysis with panel data to examine the influence of *Current Ratio* (CR), *Debt to Asset Ratio* (DAR), and *Return on Assets* (ROA) on *Price to Book Value* (PBV). Following Sugiyono (2017, 2022), the process involved organizing, categorizing, and systematically interpreting data collected through documentation, interviews, and field notes. Descriptive statistics were used to present the mean, minimum, maximum, and standard deviation of variables. Classical assumption tests—including normality, multicollinearity, heteroscedasticity, and autocorrelation tests—were conducted to ensure the validity of the regression model (Ghozali, 2013; Indrianti et al., 2022).

Panel data regression was performed using the *Common Effect Model* (CEM), *Fixed Effect Model* (FEM), and *Random Effect Model* (REM), with the Chow, Hausman, and Lagrange Multiplier tests applied to determine the most appropriate model. Hypothesis testing was carried out using *t*-tests to assess the partial effects of CR, DAR, and ROA, and *F*-tests to evaluate their simultaneous effects. The *Adjusted R-Square* value was used to assess the explanatory power of the independent variables on PBV. Overall, these techniques allowed for a robust analysis of both individual and combined effects of financial ratios on firm valuation, while ensuring that statistical assumptions were met and model reliability was maintained.

## **RESULT AND DISCUSSION**

### **Descriptive Statistics**

Descriptive statistical analysis was conducted to provide an overview of the variables analyzed in this study. The data presented includes the mean, minimum and maximum values, and standard deviation of the current ratio, debt to asset ratio, return on asset, and price to book value variables. Data processing was performed using E-Views 13 software. The following are the results of the descriptive statistical analysis:

**Table 2. Descriptive Statistics**

<b>Statistic</b>	<b>CR</b>	<b>DAR</b>	<b>ROA</b>	<b>PBV</b>
Mean	2.302743	0.472857	7.893314	5.436971
Median	1.980000	0.450000	5.660000	1.850000
Maximum	10.07000	2.430000	45.43000	324.5300
Minimum	0.220000	0.080000	-13.36000	0.390000
Std Dev.	1.701315	0.311756	8.311490	25.25626
Observations	175	175	175	175

Source: Data Processing Results with E-Views, 2025

Table 8.1 shows that from a total sample of 175 observations, the dependent variable measured by price to book value shows a minimum value of 0.390000, while the maximum value reaches 324.5300. The average value of the company is recorded at 5.436971 with a standard deviation of 25.25626.

For the current ratio variable, the minimum value is 0.220000, while the maximum value is 10.07000. The average current ratio is 2.302743 with a standard deviation of 1.701315.

For the debt to asset ratio variable, the minimum value is 0.080000, while the maximum value is 2.430000. The average debt to asset ratio is 0.472857 with a standard deviation of 0.311756.

Meanwhile, return on assets has a minimum value of -13.36000 and a maximum value of 45.43000. The average is 7.893314 with a standard deviation of 8.311490.

From the results of the analysis, it can be seen that almost all variables have a higher average than their standard deviation, indicating that the data used tends to be homogeneous and does not show significant variation.

### **Determining the Panel Data Estimation Model**

Panel data regression consists of three methods, namely Common Effect, Fixed Effect, and Random Effect. From the three models that have been estimated, the most appropriate model will be selected based on the characteristics of the data to answer the research objectives. The selection of the model is done by conducting the Chow Test, Hausman Test, and Langrange Multiplier (LM) Test.

#### **a. Chow test**

The Chow test was conducted to determine which model was more appropriate to use between Common Effect and Fixed Effect. The results of the Chow test are as follows:

**Table 3. Chow Test Results**

<b>Effects Test</b>	<b>Statistic</b>	<b>d.f.</b>	<b>Prob.</b>
Cross-Section F	1.717375	(34.137)	0.0159
Cross-Section Chi-square	62.12871	34	0.0023

Source: Data Processing Results with E-Views, 2025

Based on Table 8.2 above, it is known that the probability value for Cross-Section F is  $0.0159 < 0.05$ , so it can be concluded that the use of the Fixed Effect model is better than the Common Effect model.

#### **b. Hausman Test**

The Hausman test was conducted to determine which model was more appropriate to use between Fixed Effect and Random Effect. The results of the Hausman test are as follows:

**Table 4. Hausman Test Results**

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	8.399902	3	0.0384

Source: Data processed using E-Views, 2025

Based on the output in Table 8.3, the probability value for Cross-Section random is 0.0384, which is smaller than 0.05 ( $0.0384 < 0.05$ ). This indicates that the Fixed Effect model is better than the Random Effect model. Based on the results of the Chow test and the Hausman test, the best estimation for the panel data regression model is the Fixed Effect model, so the Lagrange Multiplier test is not required.

### Panel Data Regression Analysis

Multiple Linear Regression Analysis is used to determine the direction of the relationship between independent variables and dependent variables. The regression model used is the Fixed Effect Model (FEM).

**Table 5. Panel Data Regression Results**

Variable	Coefficient	Std. Error	t-Statistic	Prob
C	3.081326	7.696300	0.400365	0.6895
CR	-0.025617	2.090891	-0.012252	0.9902
DAR	-1.091136	10.42928	-0.104622	0.9168
ROA	0.371274	0.312966	1.186308	0.2376

Source: Data processed using E-Views, 2025

Based on the above data, a regression equation can be formulated to determine the effect of Current Ratio (X1), Debt to Asset Ratio (X2), and Return On Asset (X3) on Price to Book Value (PBV) as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3$$

$$Y = 3.081326 - 0.025617 - 1.091136 + 0.371274$$

Based on the panel data regression equation above, the following conclusions can be drawn:

- The Current Ratio (X1) variable has a coefficient of -0.025617. A negative regression coefficient indicates that for every 1-unit increase in the Current Ratio (X1) variable, the dependent variable, Price to Book Value (Y), will decrease by -0.025617.
- The Debt to Asset Ratio (X2) variable has a coefficient of -1.091136. The negative regression coefficient value indicates that for every 1-unit increase in the Debt to Asset Ratio (X2) variable, the dependent variable, Price to Book Value (Y), will decrease by -1.091136.
- The Return On Asset (X3) variable has a coefficient of 0.371274. The positive regression coefficient value indicates that for every 1 increase in the Return On Asset (X3) variable, the dependent variable Price to Book Value (Y) will increase by 0.371274.

### Hypothesis Test Results

- Partial Test (t-test)

**Table 6. Partial Test Results (t-test)**

Variable	Coefficient	Std. Error	t-Statistic	Prob
C	3.081326	7.696300	0.400365	0.6895

Variable	Coefficient	Std. Error	t-Statistic	Prob
CR	-0.025617	2.090891	-0.012252	0.9902
DAR	-1.091136	10.42928	-0.104622	0.9168
ROA	0.371274	0.312966	1.186308	0.2376

Source: Data Processing Results with E-Views, 2025

Table 6. shows the partial test (t-test) results as follows:

1. Hypothesis 1

H1: Current Ratio has a positive effect on Price to Book Value

The p-value for the current ratio is  $0.9902 > 0.05$  with a coefficient value of -0.025617, which means H0 is accepted and H1 is rejected. Thus, it can be concluded that the current ratio does not affect the price to book value.

2. Hypothesis 2

H2: Debt to Asset Ratio has a negative effect on Price to Book Value

The p-value for the debt to asset ratio is 0.9168 with a coefficient value of -0.104622, which means that H0 is accepted and H1 is rejected. Thus, it can be concluded that the debt to asset ratio does not affect price to book value.

3. Hypothesis 3

H3: Return on asset has a positive effect on price to book value

The p-value for return on assets is  $0.2376 > 0.05$  with a coefficient value of 1.186308, which means that H0 is accepted and H1 is rejected. Thus, it can be concluded that return on assets does not affect price to book value.

b. Simultaneous Test (F Test)

**Table 7. Simultaneous Test Results (F Test)**

F-statistic	2.327279
Prob(F-statistic)	0.000230

Source: Data processed using E-Views, 2025

Table 7 shows the results of the simultaneous test (F test) as follows:

Given that the F-statistic value is 2.327279 with a Prob. (F-statistic) value of  $0.000230 < 0.05$ , it can be concluded that the current ratio, debt to asset ratio, and return on asset variables have a simultaneous (concurrent) effect on price to book value.

### Results of the Coefficient of Determination Test

**Table 8. Coefficient of Determination Test**

R Square	Adjusted R Square.
0.385951	0.220113

Source: Data processed using E-Views, 2025

Table 8 shows that the coefficient of determination test results obtained an Adjusted R-Squared value of 0.220113, indicating that the current ratio, debt to asset ratio, and return on asset variables have a 22.0113% effect on price to book value, while the remaining 77.9887% is influenced by other variables outside the scope of this study.

### The Effect of Current Ratio on Price to Book Value

The results obtained from the tests conducted found that the current ratio does not have a significant effect on the price-to-book value. This indicates that investors do not consider the



current ratio of a company when making investment decisions; they only consider the company's ability to meet its current liabilities. The size of this ratio is dominated by the amount of inventory and accounts receivable, so investors are not interested in looking at a company's liquidity when investing. The results of this study are in line with the research conducted by Dwi Astutik (2017), which states that the current ratio has a negative effect on company value.

#### **The Effect of Debt to Asset Ratio on Price to Book Value**

The results of this study indicate that the Debt to Asset Ratio has no effect on the Price to Book Value. This is because it only shows the proportion between liabilities and total assets, and reflects the company's ability to meet its long-term obligations. If the percentage is smaller, it is better for the company, so investors do not focus too much on the company's solvency when investing. The results of this study are not in line with the research conducted by Rahmad Hidayat (2018), which found that the Debt to Asset Ratio has a positive and significant effect on Company Value.

#### **The Effect of Return on Assets on Price to Book Value**

The results of this study indicate that Return On Assets has no effect on Price to Book Value. This can be explained because high ROA does not always reflect market confidence in the company's long-term prospects, especially when not accompanied by a clear growth strategy. The results of this study are in line with the research by Nuryani and Sunarto (2015), which states that ROA has a significant negative effect on PBV.

#### **The Simultaneous Effect of Current Ratio, Debt to Asset Ratio, and Return on Assets on Price to Book Value**

The results obtained from testing in this study indicate that Current Ratio, Debt to Asset Ratio, and Return On Asset simultaneously affect Price to Book Value. This is particularly relevant to financial theory, specifically signaling theory, fundamental analysis theory, and agency theory. These three ratios provide important information about a company's liquidity, solvency, and profitability, which theoretically influence the market's perception of the company's value and are reflected in PBV (Brigham and Houston, 2010; Spence, 1973). The results of this study are in line with previous research conducted by (Pradnyana and Wiksuana, 2016).

### **CONCLUSION**

Based on the results of the analysis and discussion, it can be concluded that, partially, the *Current Ratio* (CR), *Debt to Asset Ratio* (DAR), and *Return on Assets* (ROA) do not have a significant effect on the *Price to Book Value* (PBV) of non-bank companies included in the *LQ45* index on the Indonesia Stock Exchange (*Bursa Efek Indonesia* – BEI) for the period 2019–2023; however, when considered simultaneously, these three variables have a significant influence on PBV. This indicates that while liquidity, solvency, and profitability ratios may not individually show a strong effect on company value, their combined influence is relevant in determining PBV. Therefore, companies are advised to manage CR, DAR, and ROA optimally in order to enhance company value and attract investor interest, researchers may use these findings as a reference for further studies on the impact of financial ratios on firm value in the Indonesian capital market, and students can benefit from this study as a source of learning and inspiration for developing future research in financial analysis and investment.

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