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The Influence of Financial Ratios: Profitability, Liquidity, and Solvency on Firm Value (A Case Study in the Financial Sector, IDX)

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Abstract

This research aims to show readers how financial ratios can influence investors in choosing a company to invest in by considering the company value. The data samples used in this research were taken from the 10 largest banking companies listed on the Indonesia Stock Exchange, based on company assets, from 2017 to 2021. The multiple regression statistical method was used in this research. The results of this research indicate that the results of this research indicate that the variables Current Ratio, Return on Assets, and Debt to Equity Ratio have a significant influence on Company Value from a simultaneous test. However, when analyzed using a partial test, the Debt to Equity Ratio variable does not have a significant influence on company value in the banking sector.

Keywords: *Profitability, Liquidity, Solvency, Banking, Investment*

Introduction

Anything related to finance is undoubtedly connected to a service that has been developed for centuries, namely banking. The banking sector is one of the most crucial factors in the economy, offering various services that can impact economic activities, ranging from storage, lending, investment, and many more. As stated in the article by the Ministry of Economic Affairs (KEMENKO Perekonomian, 2016), banking serves as the engine driving the economy, playing several roles, such as fostering the grassroots business sector, enhancing the economic capabilities of entrepreneurs and SMEs, and serving as a source of funding. Based on Law No. 10 of 1998, a bank is defined as a business entity that collects funds from the public in the form of deposits and channels them to the public in the form of credit or other forms to improve the standard of living of many people. Banks act as a crucial link in the economic cycle of a region or even a country and can influence various business sectors.

Investment is one of the driving elements of a country's economy, bridged by banking services with an adjusted system, such as securities services, to actualize stocks and other investment instruments. Investors usually have many factors to consider when selecting a company to entrust their funds. The company's value is one factor that assists investors in determining how well the company is valued by the market. "The economic condition of the company can be seen from the success of good performance; this can be seen from the financial statements that provide data, which

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in turn can indicate trends and can be applied to create various ratios." It is stated that "The economic condition of the company can be seen from the success of good performance; this can be seen from the financial statements that provide data, which in turn can indicate trends and can be applied to create various ratios (Fahriyana & Puspitarini, 2023)." As stated in their journal, Risman, Subhani, and Ushakov (Risman, Subhani, & Ushakov, Nexus between Financial Fundamentals and Automotive (Car) Industry. ARDL approach, 2021) mention that "Where changes in stock prices and trading volume of stocks at equity markets are taken as the proxies to represent the financial fundamentals." This means that changes in stock prices and trading volume in equity markets are used as proxies to represent financial fundamentals. In addition to the points mentioned in that journal, ratios that can be used as proxies for the financial fundamentals of a company include profitability (ROA), liquidity (CR), solvency (DER), compared against the company's value as a reference factor in investors' decision-making.

Theoretical Framework

According to Brigham & Houston (2014), signal theory is the perspective held by shareholders regarding a company's potential to increase its value in the future. Information about this potential is communicated by the company's management to the shareholders.

The value of a company, "Price to Book Value Ratio (PBV), is a ratio that shows the results of the comparison between the market price per share and the book value per share. This ratio is used to measure the level of stock prices, whether overvalued or undervalued." Translated, "Rasio Price to Book Value (PBV) is a ratio that indicates the results of the comparison between the market price per share and the book value per share. This ratio is used to measure the level of stock prices, whether overvalued or undervalued (Akbar, 2021)." Investors typically consider whether the company is perceived as expensive or cheap by the market by paying attention to this ratio. The smaller the ratio, the company is considered undervalued, and conversely, if the ratio is larger, the company can be deemed overvalued. The value of the company can be formulated as follows:

$$Price\ to\ Book\ Value\ Ratio = \frac{Market\ Price\ per\ Share}{Book\ Value\ per\ Share}$$

Profitability, based on (Putro & Risman, 2021), is defined as "the company's ability to earn profits. The greater the level of profit, the better management will be in managing the company." Return on Asset (ROA) is one of the ratios used to measure a company's performance by comparing net income with the total assets owned by the company. A well-performing company usually shows an increase in Return on Asset each year, indicating that the actions taken by the company, whether related to sales, investments, or closely tied to the company's profitability, are considered successful or at least have achieved the planned targets. The profitability ratio (ROA) can be formulated as follows:

$$ROA = \frac{Net\ Income}{Total\ Assets}$$

Liquidity, liquidity ratios can be used as a reference for assessing the extent to which a company can meet short-term obligations such as operational costs, short-term interest, and other company needs that require financing over a relatively short period. As explained by (Fahriyana & Puspitarini, 2023), "Current Ratio to regulate the company's ability to pay short-term obligations or debts that are due immediately when billed in their entirety. This ratio compares current assets with current liabilities." Translated, "The Current Ratio is used to regulate the company's ability to pay short-term obligations or debts that are due immediately when billed in their entirety. This ratio compares current assets with current liabilities." The Current Ratio (CR) can be formulated as follows:

$$Current\ Ratio = \frac{Current\ Assets}{Current\ Liabilities}$$

Solvency, in their article (Octaviany & Puspitarini, 2023), states that, "Debt to equity Ratio or debt to equity ratio is a debt to equity ratio calculated only by dividing the company's total debt (including short-term liabilities) by shareholders' equity." This means that the Debt to Equity Ratio is a ratio calculated by dividing the total debt of the company (including short-term liabilities) by shareholders' equity. Debt in a company is one of the factors that investors need to consider, where the debt ratio plays a role in investor decisions. (Risman, Parwoto, & Sulaeman, The Mediating Role of Firm's Performance on The Relationshipbetween Free Cash Flow and Capital Structure, 2021), "The trade-off theory asserts that any increase in corporate debt leads to an increase in the risk of bankruptcy, financial distress, and agency costs, and will further negatively impact firm value. However, debt is needed for the company's operational activities and investment, which will increase the company's profits and ultimately increase the company's value, as well as the benefits of reducing the company's tax burden." Translated, the Trade-Off theory states that an increase in corporate debt can lead to an increase in the risk of bankruptcy, financial distress, and agency costs, ultimately having a negative impact on the company's value. However, debt is necessary for the company's operational activities and investments, which can increase profits and ultimately enhance the company's value, along with the benefits of reducing the company's tax burden. The solvency ratio can be formulated as follows:

$$Debt\ to\ Equity\ Ratio = \frac{Total\ Liabilities}{Total\ Equity}$$

Hypothesis

In a study conducted by (Zurriah, 2021), it was found that "The results of this study indicate that Return On Assets (ROA) has a positive and significant effect partially and simultaneously on firm value." The results obtained show a positive impact of the financial ratio Return on Assets (ROA) on firm value. Based on the explanation above, the hypothesis is proposed:

H1. Return on Assets (ROA) has a significant influence on Firm Value (PBV).

Research on manufacturing companies in the food & beverage sector listed on the Indonesia Stock Exchange, with data from 2011 to 2016 conducted by (Kahfi, Pratomo, & Aminah, 2018), found that "Current Ratio (CR) has a significant positive effect on the firm value of manufacturing companies in the food and beverage sector

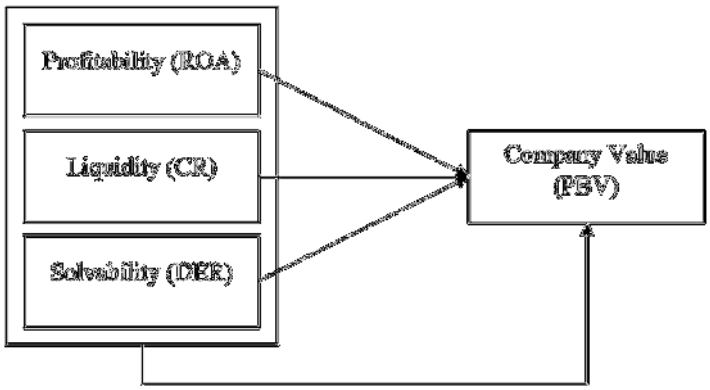

Figure 1. Conceptual Framework

in Indonesia for the period 2011-2016." Based on the explanation above, the hypothesis is proposed:

H2. Current Ratio (CR) has a significant influence on Firm Value (PBV).

Research by (Jufrizen & Al Fatin, 2020) found that "Partially, there is no influence of Debt to Equity Ratio on the firm value of pharmaceutical companies listed on the Indonesia Stock Exchange." The Debt to Equity Ratio (DER) variable does not show positive results; in other words, there is no significant influence on the firm's value. Based on the explanation above, the hypothesis is proposed:

H3. Debt to Equity Ratio (DER) has no significant influence on Firm Value (PBV).

From the results of the study by (Permana & Rahyuda, 2019), it was found that profitability, liquidity, and solvency ratios have a positive impact on the firm's value in simultaneous testing, but in partial testing, liquidity and solvency ratios show negative results. Based on the explanation above, the hypothesis is proposed:

H4. Financial Ratios: Profitability (ROA), Liquidity (CR), and Solvency (DER) have an influence on Firm Value (PBV).

Method

This study employs a quantitative descriptive method using data obtained from the 10 largest banking companies in Indonesia based on the amount of assets they possess. The sample data used covers the period from 2017 to 2021, with a total of 50 samples (10 companies x 5 years). Secondary data is utilized in this research, with secondary data referring to information collected by an organization or individual without the need for interview stages. The data is extracted from the Indonesia Stock Exchange (BEI) website.

Results and Discussion

Descriptive Statistics, according to Sugiyono (2019) is: "Statistics used to analyze data by describing or depicting the collected data as it is, without intending to draw conclusions that apply to the general population or make generalizations." The author will explain the data initially based on minimum, maximum, and mean values.

Descriptive Statistical Analysis

Based on Table 1, a total of 50 samples studied during the period 2017-2021. The calculations in the table indicate that the ROA variable has a minimum value of 0.0007 and a maximum value of 0.0313, with an average value of 0.147668 and a standard deviation of 0.0076580. For the CR variable, the minimum point is 0.1724, the maximum is 10.5640, the average is 0.674910, and the standard deviation is 2.0249468. The DER variable shows a minimum point of 3.9310 and a maximum of 170.7140, with an average of 56.570040 and a standard deviation of 31.7355851. The PBV variable indicates a minimum value of 0.3800 and a maximum of 4.6800, with an average of 1.582400 and a standard deviation of 1.1746325.

Normality Test

According to Ismanto & Pebruary (2021), the normality test aims to determine whether residuals are normally distributed or not. This can be observed from the probability values. If the probability based on the test is greater than 0.05, then the residuals are normally distributed. Conversely, if the probability is less than 0.05, then the residuals are not normally distributed.

Table 1. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
ROA	50	.0007	.0313	.014768	.0076580
CR	50	.1724	10.5640	.674910	2.0249468
DER	50	3.9310	170.7140	56.570040	31.7355851
PBV	50	.3800	4.6800	1.582400	1.1746325
Valid N (listwise)	50				

Table 2. Result Normality Test

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		50
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	.73322939
Most Extreme Differences	Absolute	.138
	Positive	.138
	Negative	-.070
Test Statistic		.138
Asymp. Sig. (2-tailed)		.018[c]

a. Test distribution is Normal.
b. Calculated from data.
c. Lilliefors Significance Correction.

Table 3. Result of Multiple Linear Regression Analysis

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.175	.357		-.490	.626
	ROA	100.166	16.429	.653	6.097	.000
	CR	.144	.060	.249	2.401	.020
	DER	.003	.004	.086	.902	.372

a. Dependent Variable: PBV

Table 4. Result Coefficient of Determination Test

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.781[a]	.610	.585	.7567614	1.177

a. Predictors: (Constant), DER, CR, ROA

b. Dependent Variable: PBV

The data in Table 3 shows a Kolmogorov-Smirnov value of 0.138 at a significance level of 0.18, which exceeds 0.05. This indicates that the distribution of residual variables is normal. From the normality test results, it can be concluded that, in general, the observed data has a normal distribution. Therefore, we can proceed with other classical assumption tests.

Regression Equation:

Y = -0.037 + 100.722 ROA + 0.142 CR + 0.33 DER

The regression coefficient β is 100.166. This means that an increase in ROE will increase PBV by 100.166.

The regression coefficient β is 0.144. This means that an increase in CR will increase PBV by 0.142.

The regression coefficient β is 0.33. This means that an increase in DER will increase PBV by 0.33.

Coefficient of Determination Test

The coefficient of determination is a measure that explains the extent to which all independent variables contribute to the variation in the dependent variable. The value of the coefficient of determination is measured by Adjusted R-Square. The higher the Adjusted R-Square value, the greater the influence of the variation in independent variables in determining the variation in the dependent variable.

This section details the methodological steps and choices used by the researcher in answering the research questions. In this section, a brief explanation is provided regarding the research approach used, the research location, the population (for

Table 5. Result Simultaneous Test

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	41.265	3	13.755	24.018	.000[b]
	Residual	26.344	46	.573		
	Total	67.608	49			

a. Dependent Variable: PBV

b. Predictors: (Constant), DER, CR, ROA

Table 6. Result Partial Test

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.175	.357		-.490	.626
	ROA	100.166	16.429	.653	6.097	.000
	CR	.144	.060	.249	2.401	.020
	DER	.003	.004	.086	.902	.372

a. Dependent Variable: PBV

quantitative research), the sample, data collection method, data collection instrument, as well as data processing and analysis methods.

The R value of 0.781 indicates that the relationship between variable (X) and (Y) is strong. The R-square value of 0.610 explains that variable (X) can describe variable (Y) by 61%, while 39% is described by other factors. The Standard Error of Estimate obtained is 0.75614, explaining the level of error in linear regression. A smaller obtained value indicates a better fit.

F-Test (Simultaneous Test)

The F-test (simultaneous test) is the initial step in determining whether the tested regression model is suitable or not. The criteria for the F-test at a significance level of 0.05 are as follows: if the probability value is greater than 0.05, then the model is not considered suitable, and if the probability value is less than 0.05, then the research model is considered suitable.

In Table 5, the calculated F-value is 24.018 with a Significance Level of F of 0.000. This calculated F-value is larger than the tabulated F-value of 2.769. Since the Significance Level of F is smaller than α = 0.050, it can be concluded that H0 is rejected, and H1 is accepted. Simultaneously, the variable (X) has a significant impact on the variable (Y).

T-Test (Partial Test)

The t-test in multiple regression analysis is used to assess the individual influence of each independent variable on the dependent variable. The criteria for the t-test at a

significance level of 0.05 are as follows: if the t-value probability is greater than 0.05, it can be concluded that the independent variable does not have a significant partial impact on the dependent variable. However, if the t-value probability is less than 0.05, the alternative hypothesis (H1) is accepted. This indicates that the independent variable has a significant partial impact on the dependent variable.

Based on the SPSS test results in Table 7, the influence of ROA, CR, and DER on PBV can be interpreted as follows:

The regression analysis result for the ROA variable on PBV shows a calculated T-value of 6.097, which is greater than the tabulated T-value of 2.423, and the Significance T-value is 0.000, which is smaller than α = 0.05. This means that the ROA variable has a significant influence on the PBV variable.

The regression analysis result for the CR variable on PBV shows a calculated T-value of 2.401, which is smaller than the tabulated T-value of 2.423, and the Significance T-value is 0.020, which is smaller than α = 0.05. This means that the CR variable has a significant influence on the PBV variable.

The regression analysis result for the DER variable on PBV shows a calculated T-value of 0.902, which is smaller than the tabulated T-value of 2.423, and the Significance T-value is 0.372, which is greater than α = 0.05. This means that the DER variable does not have a significant influence on the PBV variable.

Conclusion

From the results of this study, it can be concluded that financial ratios, reflecting company performance, play a significant role in determining the value of a company, especially in the banking sector. Profitability ratios, tested simultaneously and partially, show a positive influence on the company's value (PBV), indicating that the company's profit performance plays a crucial role in determining its value. Additionally, liquidity ratios also have a positive influence, although not as substantial as profitability ratios. Nevertheless, the liquidity ratio (CR) is still considered to have a significant contribution to the company's value. On the other hand, although solvency ratios do not show strong significance, some tests yield positive results, especially in simultaneous testing.

Overall, financial ratios, including profitability, liquidity, and solvency, have a substantial impact on the company's value, as indicated by the coefficient of determination reaching 61%. This emphasizes that the company's financial performance, liquidity availability, and its ability to bear debt play crucial roles in determining its value. However, it should be noted that there are other factors beyond financial ratios that can also influence the company's value, given that the remaining 39% is influenced by other factors not covered in this study.

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