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THE EFFECT OF PROFITABILITY, CAPITAL STRUCTURE, FIRM SIZE, AND ASSET GROWTH ON FIRM VALUE

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ABSTRACT
This study aims to collect empirical data on the effect of profitability, capital structure, firm size, and asset growth on firm value in banking companies listed on the Indonesia Stock Exchange in 2018 – 2020. This study uses a purposive sampling method with 31 banking companies listed on the Indonesian Stock Exchange. The Microsoft Excel application was used to enter and calculate the study's data, and the Eviews 12 tool was used to process it. The results of this study indicate that firm size significantly positively affects firm value while profitability, capital structure, and asset growth have no significant effect on firm value.

Keywords: *firm value, profitability, capital structure, firm size, asset growth*

1. INTRODUCTION

The increasing number of companies marks an increase in the economy in Indonesia. This is also supported by the rapid development of the globalization era which is increasingly sophisticated and advanced. With the increasing number of existing companies, the competition is getting tougher so companies must continue to develop, innovate, and improve their performance to survive and compete with other companies. Every company must have goals to be achieved, in the short term and long term. The role of company management is needed in supporting the achievement of goals and business continuity of a company.

One of the short-term goals of the company is to maximize profits. Maximum profit can be achieved if the company improves its performance in all aspects such as increasing productivity, raising standards for goods and services, competent human resources, effective and efficient use of resources and operational systems, understanding the market, and making the right management strategy decisions for the company. Increasing the value of the company is a long-term goal of a company. High company value will be followed by high shareholder wealth. For investors, the value of the company is important and an indicator of how the market views the company. The company's stock price in the market (Indonesian Stock Exchange) fluctuates and is influenced by several factors, both external and internal. External factors that influence a country's economic conditions are government policies, exchange rates, inflation rates, and interest rates. Internal factors that can affect the price of a stock, such as company performance.

The increase/decrease in the performance of a company can be seen through the company's financial statements. Financial statements have an important meaning in assessing a company because the information in the financial statements can be analyzed whether the company is good or not for those concerned [1]. Interested parties in using this financial report are internal and external parties. The company's management as an internal party uses financial reports as material for evaluation, performance appraisal, and consideration in making decisions regarding the company's strategy in the future. For external parties, financial statements are used to see the performance of company management. Good financial performance will be seen from the financial statements so that the stock price in the market will increase. This increasing share price will have an impact on increasing the value of the company so that the return received by shareholders will also be higher. With good performance and high returns obtained, investors assume that the paid-up capital to the company can be used by the company effectively and efficiently. This can make investors invest more and increase investor confidence in the company.

Previous researchers have conducted many studies related to firm value, but the results are inconsistent. Previous research conducted by [2] [3] shows that profitability significantly positively affects firm value. Research conducted by [4] [5] showed that firm value is not significantly affected by profitability. Moreover, research conducted by [6] [7] showed that capital structure significantly positively affects firm value. Contrarily, research conducted by [8] showed that capital structure did not significantly positively affect firm value. Research conducted by [9] [10] [3] showed a significant effect of firm size on firm value. Otherwise, research by [11] showed that firm value is not significantly affected by firm size. Research conducted by [12] states that asset growth has a significant effect on firm value while [13] [14] states that asset growth does not significantly positively affects firm value. Because there are differences from the results of previous studies regarding the factors that influence firm value, this research will provide empirical evidence about the effect of profitability, capital structure, firm size, and asset growth on banking company value on the IDX during 2018-2020.

2. LITERATURE REVIEW

Signaling Theory is a theory that describes how firm management provides instructions to investors on how management evaluates the company's prospects. [15]. This theory explains how company management must be wise in providing signals in the form of information needed by investors. Company management provides information that can be a positive signal (good news) or a negative signal (bad news) for investors. Management that gives a signal in the form of disclosing information to investors to reduce information asymmetry can bring an increase in company value [16]. This information can be used by investors to assess the company's growth prospects in the future.

Agency theory explains the agency relationship. According to [17], A legal arrangement in which one or more people (the principals) select another person (the agent) to carry out particular activities on their behalf is known as an agency relationship. Most of the agency relationships between principals and agents will incur costs and there will be conflicts of interest that occur between managers and shareholders in increasing firm value. Therefore, a clear and mutually beneficial work contract agreement is needed between managers and shareholders in terms of arrangements related to the implementation of obligations and the granting of rights from the principal to the agent [18].

When referring to a company's share price, firm value is the amount that purchasers are willing to pay if the business is sold [19]. By maximizing the wealth or value of a company, the welfare of shareholders can increase. Shareholders play an important role in increasing the company’s value. If they feel that the company can provide them value, they will increase the stock market value of the corporation [11].

According to [20], profitability is a ratio that provides an overview of how companies use assets to generate profits for the company. Measurement of a company's financial performance can use the profitability ratio. Optimal company profit is one measure of the success rate of management and shows good financial performance [21].

The company utilizes funding sources from internal and external parties to finance its business operations and future company growth, this is called the capital structure [9].

Firm size is a grouping of several groups of companies, such as large companies, medium-sized companies, and small companies [3]. Firm size can be used as an illustration of the financial strength of a company. Investors put greater trust in large companies because they are considered to have more stable conditions, making it easier for businesses to obtain funding [11].

Asset Growth is a ratio that measures changes (increases or decreases) in total assets owned by a company.

Research Hypothesis

The Effect of Profitability on Firm Value

Profitability is the ability of a company to turn a profit, which will affect the value of a company. Investors are very interested in profitability to assess how well managers use the capital they have invested in the company to generate investment returns [25]. Companies with increased profitability will draw more investors to put their money into the business. Investor view that the company's management can perform well so that it will provide added value to the capital invested in the company. The research conducted by [3] [28] showed that profitability significantly positively affects firm value.
H1: Profitability significantly positively affects firm value.

The Effect of Capital Structure on Firm Value

Capital structure is the proportion of company funding both external and internal in financing the company's operations and growth. The capital structure shows the percentage of debt used to finance company assets. Investors can understand how to balance risk and reward in their investments [26]. The greater the level of leverage of a company, the greater the level of debt used by the company. Leverage value rising can be a sign that the company is doing well because management that uses debt in its operational activities will work for the continuity of the company. This is because creditors will monitor the company more closely regarding the policy on the use of debt given to the company. Management will also have a sense of responsibility with the use of debt so that it will use it more wisely for the company's needs. The previous study showed that capital structure significantly positively affects firm value [6] [22].
H2: Capital structure significantly positively affects firm value.

The Effect of Firm Size on Firm Value

Company size is an indicator that shows the size of a company. The bigger the company, the more investors will see that the company is more capable of managing its operations so that there is an increase in profit. Large companies are also considered to have more control over market conditions so that they can face economic competition that is or will occur in the future [27]. This is a positive signal for investors so that investors will invest in the company. The research conducted by [3][10] showed that firm size significantly positively affects firm value.

H3: Firm size significantly positively affects firm value

The Effect of Asset Growth on Firm Value

Companies with assets that continue to grow have the potential to generate greater profits so that the growth of company assets can influence market perceptions and reactions that can benefit companies in investment.

The company's growth is a good sign for investors that the company has profitable aspects. The company is also expected to be able to provide returns on investment for investors so that they can show good company growth. [22]. Previous research showed that asset growth significantly positively affects firm value [12].

H4: Asset Growth significantly positively affects firm value

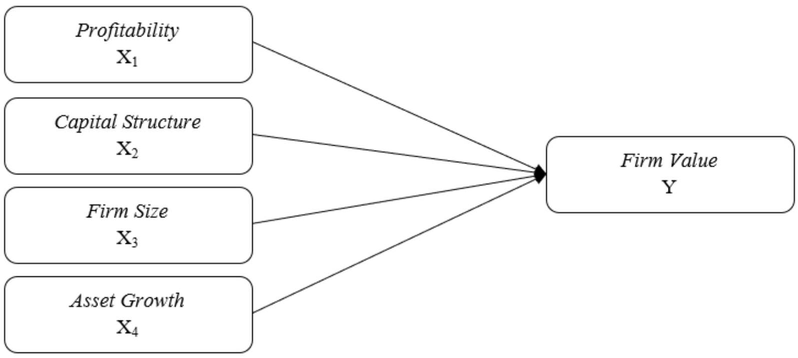

Figure 1. Research Model

3. RESEARCH METHOD

This research uses a quantitative descriptive research design which is a research study to describe a systematic, factual, and accurate picture according to the facts regarding the characteristics of the research population [23]. Purposive sampling was used to collect the research sample, which allowed the samples to be chosen based on predetermined criteria.

The study's sample selection criteria were as follows.:

1. Banking companies that have been consecutively listed on the Indonesia Stock Exchange during 2018 – 2020.
2. Banking companies that earn profits during 2018 – 2020.

Using the purposive sampling method approach, 31 banking companies listed on ISE were acquired as samples.

Variables and The Operational Definitions

In this study, the dependent variable is firm value, which uses PBV proxy, and the independent variables are profitability (ROA), capital structure (DER), firm size (SIZE), and asset growth (AG):

Firm value is the view and perception of investors towards a company which is often associated with the company's stock price. The firm value in this study is proxied using PBV.

$$\boldsymbol{PBV = \frac{Market\ Price\ per\ Share}{Book\ Value\ per\ Share}}$$

The ability of the company to make a profit is referred to as profitability. The profitability in this study is proxied using ROA.

$$\boldsymbol{ROA = \frac{Net\ Income\ After\ Tax}{Total\ Assets}}$$

Capital structure is the proportion of company funding both external and internal in financing the company's operations and growth. The capital structure in this study is proxied using DER.

$$\boldsymbol{DER = \frac{Total\ Debt}{Total\ Equity}}$$

Firm size is an indicator that shows the size of a company that can be seen from the total asset value and total sales of the company. Firm size is calculated using the natural logarithm of total assets.

$$\boldsymbol{Firm\ Size = Ln\ (Total\ Asset)}$$

Asset Growth is a ratio that measures changes (increases or decreases) in total assets owned by a company.

$$\boldsymbol{Asset\ Growth = \frac{Total\ Asset\ (t)\ - Total\ Asset\ (t-1)}{Total\ Asset\ (t-1)}}$$

Empirical Model

Models to be analyzed in the research are as follows:

$$PBV = \propto + \beta_1(ROA) + \beta_2(DER) + \beta_3(SIZE) + \beta_4(AG) + \varepsilon$$

Test Selection of the Best Panel Data Regression Estimation Model

Methods used in panel data regression [24]:

1. **Common Effect** which states that each variable has an intercept and regression coefficient that is not different and is the simplest method because it only combines time series and cross-section data.

2. **Fixed Effect** which assumes each variable has a different intercept while the regression coefficient is not different and by using dummy variables, differences between individuals can be overcome from differences in intercepts in the study.
3. **Random Effect** which assumes that each variable has a different intercept and there is a random component in it, while the regression coefficients are not different.

Selection of the best model is done by testing the Chow test, the Hausman test, and the Lagrange Multiplier test.

4. RESULTS AND DISCUSSION

The data used in this research are panel data, a combination of time series and cross-section data. The more acceptable model to utilize in this study is the Fixed Effect Model, which is based on the results of the Chow test and Hausman test that have been conducted.

Multicollinearity Test

The multicollinearity test was used to determine whether there was a close relationship between the independent variables in the panel data regression model. Good data must be free from multicollinearity problems so there is no relationship between the independent variables used in the regression model. If the coefficient value between independent variables < 0.8, it means that there is no multicollinearity so there is no relationship between the independent variables.

Table 1. Multicollinearity Test

	ROA	DER	SIZE	AG
ROA	1	-0.3173378	0.18134669	0.11393808
DER	-0.3173378	1	0.26855593	-0.0815946
SIZE	0.18134669	0.26855593	1	-0.1024363
AG	0.11393808	-0.0815946	-0.1024363	1

Source: Output of EViews

Based on the results of the multicollinearity test on the independent variables, the probability value is < 0.8, which means that there is no multicollinearity so there is no relationship between the independent variables.

Heteroscedasticity Test

The heteroscedasticity test is used to determine whether in the panel data regression model there is an inequality of variance from the residual value of one observation with other observations. Good data must have the same residual variance (homoscedasticity). There are several heteroscedasticity tests for this study using the White test. If the probability value is <0.05, it means that there is a heteroscedasticity problem in the panel data. If the probability value is > 0.05, there is no heteroscedasticity problem in the panel data.

Table 2. Heteroscedasticity Test

F-statistic	1.322043	Prob. F	0.2140
Obs*R-squared	17.83571	Prob. Chi-Square	0.2144
Scaled explained SS	33.72701	Prob. Chi-square	0.0023

Source: Output of EViews

Based on the results in Table 2, the Prob value was obtained. The Chi-Square in the Obs*R-squared row is 0.2144 > 0.05, which means that there is no heteroscedasticity problem in the panel data.

Multiple Linear Regression Test Results

Table 3. The Results of Multiple Linear Regression Test

Variable	Coefficient	Std. Error	t-Statistics	Prob
C	-69.62251	23.08124	-3.016411	0.0038
ROA	34.60566	17.54703	1.972166	0.0534
DER	0.020896	0.112805	0.185242	0.8537
SIZE	2.230152	0.731060	3.050575	0.0034
AG	-1.264179	0.793462	-1.593244	0.1165
R-Squared				0.8425
Adjusted R-squared				0.7503
F-statistics				9.1308
Prob (F-statistics)				0.0000

Source: Output of EViews

Coefficient of Determination Test (Adjusted R^2)

Based on the results in Table 3, the value of Adjusted R-squared is 75.03%, which means that the variables of profitability, capital structure, firm size, and asset growth in this study can explain the firm value of 75.03% and the remaining 24.97% is explained by other independent variables outside of this study.

Statistical F-Test Results

Based on the results in Table 3, the value of Prob (F-statistic) is 0.000000 < 0.05 which means that the independent variables, namely profitability, capital structure, firm size, and asset growth simultaneously significantly positively affect the firm value variable that the research model can be used to test research hypotheses.

Statistical t-Test Results

From the results in Table 3, SIZE significantly affects firm value. Meanwhile, ROA, DER, and AG had an insignificant effect on firm value.

Test of the effect of profitability on firm value

The t-test results in Table 3 showed that profitability (ROA) does not significantly affect firm value (PBV). This outcome is in line with the findings of study by [4][5] [19], which indicated that profitability has not impact firm value.

Test of the effect of capital structure on firm value

The t-test results in Table 3 showed that capital structure (DER) does not significantly affect firm value (PBV). This outcome is consistent with the findings of [8][10] studies, which indicated that capital structure has not impact firm value.

Test of the effect of firm size on firm value

The t-test results in Table 3 showed that firm size (SIZE) significantly positively affects firm value (PBV). This finding fits the research by [2][3][10], which stated profitability significantly positively affects firm value. Contrarily, [11][29] stated that SIZE does not significantly affect firm value. Large corporations are easier to enter the capital market, so encourages investors to put money into the company.

Test of the effect of asset growth on firm value

The t-test results in Table 3 showed that asset growth (AG) has no significant effect on firm value (PBV). This is to the research by [13][14], which indicated that asset growth does not affect firm value.

5. CONCLUSIONS

This study was conducted to ascertain the effect of profitability, capital structure, firm size, and asset growth on firm value in banking companies listed on the ISE from 2018 to 2020. Companies that meet the sample criteria are 31 companies with 93 data collected.

Based on the tests, the Adjusted R-squared value in this study was 75.03%, which means that the variables of profitability (ROA), capital structure (DER), firm size (SIZE), and asset growth (AG) in this study can explain the value of a company (PBV) of 75.03% and the remaining 24.97% is explained by other independent variables outside of this study.

Based on the tests, the Prob (F-statistics) value is $0.000000 < 0.05$, which means that the independent variables, namely profitability, capital structure, firm size, and asset growth simultaneously significantly affect the firm value variable so that the research model can be used to research hypothesis testing.

Based on the data that have been collected, the hypothesis testing that has been carried out, and the results obtained from multiple linear regression testing, the conclusions are obtained:
1. Profitability has not significantly affected firm value.
2. Capital structure has not significantly affected firm value.
3. Firm size significantly positively affects firm value.
4. Asset Growth has not significantly affected firm value.

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