The Mediating Role of Dividend Policy in Relationship Between Profitability and Firm Size on Firm Value

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Abstract

This research was conducted with the aim of obtaining empirical evidence regarding the effect of profitability and firm size on firm value with dividend policy as a moderating variable in automotive companies listed on the Indonesia Stock Exchange 2015 to 2019. This research uses a quantitative method. Sources of data in this research using secondary data. The population used for this study were 15 automotive companies listed on the Indonesia Stock Exchange from 2015 to 2019. The research sample used was purposive sampling method in order to obtain a sample of 10 companies with an observation period of 5 years. Data collection techniques using literature studies and documentation studies. The data analysis technique used descriptive data analysis, classical assumption test, Moderation Regression analysis, partial test, and moderation test. The results of testing the first hypothesis show that profitability has a positive effect on firm value, the second hypothesis shows that firm size has no effect on firm value, the third hypothesis shows that profitability has a positive effect on firm value with dividend policy able to beused as a moderating variable, and the fourth hypothesis shows that firm size has no effect on firm value with dividend policy unable to be used as a moderating variable.

Keywords:
Dividend Policy, Profitability, Firm Size, Firm Value.

1. Introduction

Firm value is the company's ability as shown by the stock price formed by the demand and supply of the capital market which reflects the public's assessment of the company's ability (Harmono, 2009). The value of the company is an important thing because the value of the company determines the level of prosperity of investors. Thehigher the value of the company, the level of investor prosperity is also high. The value of the company has a view that an investor will have achievements in the company for managing resources in the company. The increasing number of investors who buy shares in the company will make the share price also increase, then the value of the company will also increase. The rise or fall of the stock price in a company can determine the value of the company to investors.

Firm value has a close relationship with profitability. If a good company value attracts investors to invest inthe company, with the hope that they can make a profit. The increasing number of investors to invest in the companywill increase the share price in the company and the outstanding shares will increase. Has an impact on increasing share prices which result in an increase in the value of the company. An increase in the value of the company becomes a desire of the owner in the company, because the increasing value of the company can show prosperity to shareholders. One of the factors that affect firm value is profitability. Brigham and Houston (2013) define profitability as the end result of a number of company management policies and decisions. Profitability is the most important element in the company's ability to achieve profits, profitability also shows a measure of the effectiveness of a company's management. Companies with a high level of profitability will attract investors to invest in shares in the company. Because high profitability reflects the good prospects of the company in the future.

In addition to profitability, company size can also increase the value of the company this is because according to Riyanto (2012) Company size (Firm Size) describes the size of a company aimed at total assets. Currently, the financial condition alone is not enough to guarantee that the value of the company will continue to increase. For this reason, companies also need to pay attention to the prosperity of shareholders by distributing dividends, dividend policy can strengthen the company so that it can increase the value of the company. The company's goal must be to do business in specific activities that are economically and socially beneficial, the company must develop the organization to continue its business, the company must earn enough profit to survive so that it can prosper the shareholders in the company by distributing dividends. In this study, dividend policy will be a moderating variable that can strengthen the relationship between profitability and firm size to firm value.

2. Literature Review

2.1 Signaling Theory

Brigham dan Houston (2013) Signaling Theory about how the company should provide signals to users of financial statements. Submission of financial statements can be a signal. Investors will catch signals in the form of financial reports and will analyze financial conditions so that they can make the company have good prospects in thefuture. The purpose of Signaling theory is to increase the value of a company when selling shares. Signals can be in the form of financial or non-financial information stating that the company is better than other companies. Good quality companies will deliberately give a signal to the market, so that the market is expected to be able to distinguish between good and bad quality companies. In order for the signal to be effective, it must be able to be responded to by the market and perceived as good, and not easily imitated by poor quality companies.

2.2 Firm Value

Firm Value is a measure of the successful implementation of financial management functions. Husnan (2013) firm value as the price that prospective buyers are willing to pay if the company is sold firm value can describe the state of the company. The better the value of the company, the company will be viewed favorably by potential investors. The value of the company can provide maximum shareholder prosperity if the company's share price increases. Firm value is very important because it reflects how much the company can provide profits for investors. Firm value is a positive signal for investors, that a high company value reflects the prosperity of high shareholders. The higher the share price, the higher the prosperity of shareholders. This study uses the measurement of firm value is Price Book Value (PBV) because price book value is widely used in decision making. Weston dan Copeland (2008) Price to Book Value (PBV) which is one of the variables that an investor considers in determining which shares to buy, this ratio explains that the market price of a share in its book value gives an indication of the investor's view of the company. The company is seen as good by investors, meaning a company with safe profitsand cash flows and continues to grow.

2.3 Dividend Policy

An investor invests in a company of course expects a return or profit to be obtained from the investment he has made. Profits that can be received by investors or shareholders from company owners in the form of dividend policy.Sartono (2012), dividend policy is a decision to determine whether the company's profits will be distributedto investors as dividends or will be retained in the form of retained earnings for investment financing in the future. Dividend policy is a decision made by management to determine how much profit will be distributed to investors or the company prefers not to distribute dividends, because it will be used as retained earnings to finance company funding. This study uses a measurement of dividend policy is Dividend Payout Ratio (DPR). Sudana (2011), what is meant by the Dividend Payout Ratio is a ratio that measures how much of the net profit after tax is paid as dividendsto shareholders. When a company decides how much cash to distribute to shareholders, the company's goal must be prioritized, namely maximizing shareholder value.

2.4 Profitability

Fahmi (2013) Profitability ratio is a evince the company's success in generating profits. Potential investors will carefully analyze the smooth running of a company and its ability to earn profits. The better the profitability ratio, the better the ability to describe the company's high profitability. This research uses a profitability measurement is Return on Assets (ROA). Brigham and Houston (2013) Return on assets (ROA) is the company's ability to generate profits by using the total assets (wealth) owned by the company after adjusting for the costs that fund these assets. Return on assets (ROA) is used to measure the company's management ability to earn profits, the greater the return on assets (ROA) of a company, the greater the level of profit achieved and the better the company's position in terms of asset use.

2.5 Firm Size

Rianto (2012) Firm size describes the size of a company that is aimed at total assets. The greater the total assets owned by the company, the greater the size of the company. The size of the total assets also affects the total productivity of the company, so that the profits generated by the company will also be affected. Profits generated by companies that have large assets will affect the value of the company will increase. Large companies that are already strong will find it easier to obtain capital in the capital market compared to small companies, because the ease of access means that large companies have greater flexibility. The size of the company becomes a scale, where the size of the company can be classified based on the size of the total assets owned by the company. The larger the size of a company, the greater the tendency to use foreign capital. This is because large companies require large funds to support their operations, and one alternative to fulfill it is with debt from foreign capital if their own capital is insufficient, so that large companies tend to be able to pay dividends because the company maintains the reputation of its investors. shareholders and can increase firm value.

2.6. Profitability to firm value

Profitability is the most important factor because it is a determinant in investment by potential investors, because investors will see the profitability of the company. The greater the profitability of a company, the greaterthe level of profit achieved and the better the position of the company in terms of asset use so as to increase thevalue of the company. This hypothesis is also supported by research by Suliastawan and Purnawati (2020), Deborah and Marsudi (2018), Astakoni, et al (2017), Puspitaningtyas (2017), Sabrin, et al (2016), Sucuahi and Cambarihan (2016) and Puspitaningtyas (2017) which shows the results that profitability has an effect on firm value.
H1: Profitability has a positive effect on firm value

2.7. Firm size to firm value

Firm size is a measure used to reflect the size of the company based on the company's total assets. The greater the total assets of the company, the greater the size of a company, the greater the capital that will be invested by the company. So it can be said that the size of the company is the amount of assets owned by the company. Basedon this, the larger the size of the company, there is a tendency for investors to pay attention to the company. The response given by investors is because large companies have more stable conditions so that they attract investors to own company shares and result in an increase in company value. This hypothesis is also supported by research by Rukmawanti, et al. (2019) which shows that firm size has an effect on firm value.
H2: Firm size has a positive effect on firm value

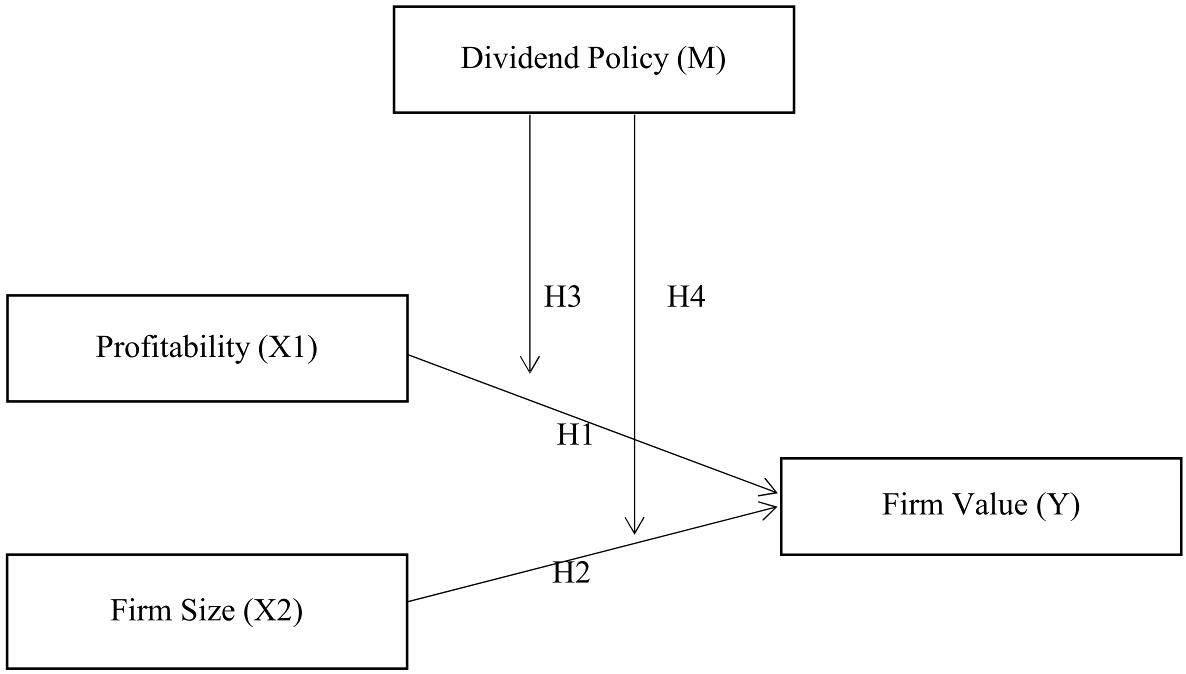
2.8 Profitability has a positive effecton firm value with dividend policy as moderating variable

Companies with a high level of profitability have a greater opportunity to pay dividends with greater value to shareholders. In addition to the greater value, the company also has a greater opportunity to pay dividends on a regular basis. Investors tend to like companies that distribute dividends regularly, rather than companies that distribute dividends fluctuatingly so that it will increase the value of the company through increasing stock prices, sothat dividend policy is able to strengthen the influence of profitability on firm value. This hypothesis is also supported by research by Suliastawan and Purnawati (2020) which states that dividend policy can moderate profitability on firm value.
H3 : Profitability has a positive effect on firm value with dividend policy as a moderating variable

2.9 Firm size has a positive effect on firm value with dividend policy as moderating variable

Firm size describes the size of a company that is aimed at total assets, companies that have a large size will have a larger amount of capital and the company's operational activities will also be large, so that the profits generated can be distributed to shareholders, the higher the amount of dividends distributed The higher the value of the company in the eyes of investors, the existence of a dividend policy can strengthen the relationship between company size and company value. This hypothesis is also supported by research by Kalsum, et al. (2017) which states that dividend policy can moderate firm size on firm value.
H4 : Firm size has a positive effect on firm value with dividend policy as a moderating variable

Research Concept Framework



Picture 1. Research Concept Framework

3. Research methods

This type of research is using a quantitative approach. Sources of data in this study using secondary data. The population used for this research is automotive companies on the Indonesia Stock Exchange in 2015 – 2019. The research sample used is the purposive sampling method. The criteria are as follows: 1. Automotive companies that have been listed on the Indonesia Stock Exchange (IDX) during the 2015-2019 period, 2. Automotive companies that publish audited financial reports for the 2015-2019 period, 3. Automotive companies that use the rupiah currency for the 2015-2019 period.The research sample obtained is 50 samples. The data analysis technique used Moderation Regression analysis.

4. Data Collection

The data used in this research is secondary data. Secondary data is an indirect data source that provides datato data collectors, for example through other people or through documents (Sugiyono, 2017) Secondary data in this study is in the form of financial report data that has been seen. Sources of data obtained through the financial statement database on the Indonesia Stock Exchange (IDX), data from financial statements for 2015 to 2019 contained in the official website www.idx.co.id or websites of sample companies.

5. Results and Discussion

5.1 Descriptive Statistic

Table 1. Descriptive Analysis

Variable	N	Minimum	Maximum	Mean	Std. Deviation
Firm Value (PBV)	50	0.0995	4.7581	1.249656	1.2635101
Profitability (ROA)	50	-0.1340	0.7160	0.066818	0.1232262
Firm Size (SIZE)	50	26.3147	33.4945	29.499374	1.8920636
DividendPolicy (DPR)	50	-0.9883	38.1944	1.185718	5.4087900

Based on table 1 above describes descriptive statistical variables in this study. The minimum is the smallestvalue from a series of observations, the maximum is the largest value from a series of observations, the mean is the average value of the entire data, while the standard deviation is the root of the sum of the squares of the difference between the data values and the average divided by the number of data. Table 2 shows a descriptive study with a sample size of 50 which came from a sample of automotive companies listed on the Indonesia Stock Exchange (IDX) in the 2015-2019 period.

5.2 Moderating Regresion Analysis

This research consisted of two independent variables, one dependent variable, and one moderating variable. Therefore, moderating regression analysis is used. The analysis is used to see whether the moderating variable (XM)affects the influence between the X variable as the independent variable (independent variable) on the Y variable (dependent variable). This influence can then be used to find the effect of variable X on variable Y. Then see whether the variable (XM) as a moderating variable affects the relationship between variable X and Y. Moderating Regression Analysis is expressed in the following equation:

Equation 1 : $Y = \alpha + b_1X_1 + b_2X_2 + e$

Equation 2 : $Y = \alpha + b_1X_1 + b_2X_2 + b_3 X_1M + b_4 X_2M + e$

Keterangan :

Y : Firm Value
α : Constant
b : Variable Coefficient
X_1 : Profitability
X_2 : Firm Size
M : Dividend Policy
e : *Error*

The estimation results of the regression coefficients are presented in table 2.

Table 2. Results of Regression Analysis Without Moderating

Variable	Beta
Constant	1.399
Profitability	3.299
Firm Size	-0.013

Based on Table 2, the equation of linear regression analysis is obtained as follows:

Equation 1 : $Y = 1{,}399 + 3{,}299\ X_1 – 0{,}013X_2$

The explanation of the equation is as follows:

1. From equation 1 above, it can be explained that with a constant value of 1.399, it means that if the profitability and firm size variables have an effect on the firm value variable, it is 1.399.
2. The regression coefficient of Profitability is 3.299, a coefficient that has a positive direction means that there is a unidirectional relationship between profitability and firm value, which means that there is a positive relationship between profitability and firm value.
3. The regression coefficient of firm size is -0.013, a coefficient that has a negative direction means that there is a non-unidirectional relationship between firm size and firm value, which means that there is a negative relationship between firm size and firm value.

Table 3.Results of Moderating Regression Analysis

Variabel	Nilai Beta
Constant	1.514
Profitability	1.261
Firm Size	-0.028
Profitability with dividend policy as moderating variable	16.687
Firm Size with dividend policy as moderating variable	-0.001

Based on Table 3, the equation of Moderating Regression Analysis is obtained as follows:

Equation 2 : $Y = \alpha + b_1X_1 + b_2X_2 + b_3 X_1M + b_4 X_2M + e$

The explanation of the equation is as follows:

1. From equation 2 above, it can be explained that with a constant value of 1.514, it means that if the variables of profitability, firm size, dividend policy moderation with profitability and dividend policy moderation with firm size, there will be an influence on the firm value variable of 1.514.
2. The regression coefficient of Profitability is 1.261, a coefficient that has a positive direction means that there is a unidirectional relationship between profitability and firm value, which means that there is a positive relationship between profitability and firm value.
3. The regression coefficient of firm size is -0.028, a coefficient that has a negative direction means that there is a non-unidirectional relationship between firm size and firm value, which means that there is a negative relationship between firm size and firm value.
4. The regression coefficient of Profitabilitywith dividend policy as moderating variableis 16,687. The coefficient that has a positive direction means that there is a unidirectional relationship between profitability and firm value with dividend policy as moderating variable.
5. The regression coefficient of Firm Size with dividend policy as moderating variable is -0.001, a coefficient that has a negative direction means that there is a non-unidirectional relationship between firm size and firm value with dividend policy as moderating variable.

Table 4. t test

Variable Independent	Significant t test	Result t test
Profitability	0,027	Accepted
Firm Size	0,894	Rejected

Based on table 4 the results of the t-test on the independent variables in detail can be explained as follows:

1. Profitability has a positive effect on firm value
   Based on table 4 with a confidence level of 5%, the results of testing the first hypothesis (H1) indicate that profitability has a positive effect on firm value. This can be seen from the 5% confidence level, indicating that it is greater than the tsign value (0.05 > 0.027). Thus the test shows H1 is accepted.
2. Firm size has no effect on firm value
   Based on table 4 with a confidence level of 5%, the results of testing the second hypothesis (H2) indicate thatfirm size has no effect on firm value. This can be seen from the 5% confidence level, indicating that it is smaller than the tsign value (0.05 < 0.894). Thus the tester shows H2 is rejected.

5.3 Moderating Test

Table 5.Moderating Test

Variable Moderating	Significant Moderating Test	Result Moderating Test
Profitabilitywith dividend policy as moderating variable	0,000	Accepted
Firm Size with dividend policy as moderating variable	0,154	Rejected

Based on table 5 the results of the moderation test in detail can be explained as follows:

1. Profitability has a positive effect on firm value with dividend policy as moderating variable
   Based on table 5 with a 5% confidence level, the results of testing the third hypothesis (H3) show that profitability has a positive effect on firm value with dividend policy as moderating variable. This can be seen from the 5% confidence level, indicating that the value of is greater than the tsign value (0.05 > 0.000). Thus the test shows that H3 is accepted.
2. Firm size has no effect on firm value with dividend policy as moderating variable
   Based on table 5 with a confidence level of 5%, the results of testing the fourth hypothesis (H4) show that firm size has no effect on firm value with dividend policy as moderating variable. This can be seen from the 5% confidence level, indicating that the value of is greater than the tsign value (0.05 > 0.154). Thus the test shows H4 is rejected.

6. Conclusion

Profitability has a positive effect on firm value. Because more increasing Return on Assets (ROA) of a company, the greater the level of profit achieved and the better the position of the company in terms of the use of assets so as to increase the value of the company. Firm size has no effect on firm value. Because the size of the company will not affect the size of the company's value. No matter how big the company is when there are rumors that the company is experiencing losses and is on the verge of bankruptcy, investors will automatically not invest in the company. So the size of the company cannot affect the value of the company. Profitability has a positive effect on firm value with dividend policy able to be used as a moderating variable. This is because companies with a high level of profitability have a greater opportunity to pay dividends with a greater value to shareholders. So that the dividend policy is able to strengthen the influence of profitability on firm value. Firm size has no effect on firm value. Dividend policy cannot be used as a moderating variable. Because the larger the company uses debt, the company tends to pay dividends in smaller amounts because the profits obtained from the debt are first paid to creditors along with the interest costs which of course will affect investors' perceptions of the value of the company and make dividend policy by distributing dividends. unable to moderate the effect of firm size on firm value.

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