Determinants of Firm Value:
Dividend Policy and Debt Policy Theory Testing

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ABSTRACT

The long-term goal of a business organization in financial perspective is to maximize the value of the company. In public companies, firm value is the perception of shareholders related to the success of the company, which can be reflected in the price of outstanding shares on the capital market. The aims of this research are to examine the dividend policy and debt policy theory, and the effect on firm value. Firm value is investor’s perception about the firm success that can be seen from the outstanding stock price in stock market. Sample in this research consists of non financial firms listed in LQ 45 consistently for five years in period 2013-2017. Samples are selected with purposive sampling method and there are 73 observations based on the defined criterias. Data analysis technique used in this research is Multiple Regression Analysis (Ordinary Least Square). The results show that dividend policy has significant positive effect on firm value, while debt policy has no significant effect on firm value. The managerial implication of this research is the importance of the company in making optimal dividend decision in order to give a positive signal to the market, so it can attracts investors which will ultimately increase the value of the company.

ABSTRAK


1. INTRODUCTION

One of the factors supporting the progress of the country’s development is the existence of a well-running business industry. To achieve this, companies are competing to improve their quality in order to compete in the industry and be able to attract many consumers. There are many ways companies can do to achieve success, one of them is by increasing the value of the company. Maximizing the company or firm value is the goal of the establishment of a company.

The firm value is the price that a buyer willing to pay if the company is sold. Firm value is also the perception of shareholders related to the success of a company, which can be reflected in the price of outstanding shares on the capital...
market. A high firm value indicates a high level of shareholder’s prosperity (Martha & Lena, 2017). In addition, high firm value can increase market confidence in current and future company performance.

There are several factors that can influence the firm value, such as dividend policy, debt policy, and investment decisions. Dividend policy is the percentage of profit paid to shareholders (Harmono, 2014). Dividend policy is related to the use of profits which are the right of shareholders, whereby the company’s profits can be distributed as dividends or retained to be reinvested.

Dividend payment can reflect the condition of a company. The greater amount of dividends paid to shareholders, the company’s performance is considered to be good because the company is able to generate high profits. The amount of dividends paid is expected to increase the demand of company’s shares so that the stock’s price is also increasing. High stock’s price can indicate the high value of the company.

The explanation is supported by research conducted by Parminto, et al (2016) and Rehman (2016) which state that dividend policy has a significant positive effect on firm value. In line with these results, research conducted by Esana & Ari (2017) and Martha & Lena (2017) also found that dividend policy has a positive effect on firm value.

Another factor that affect the firm value is debt policy. Debt policy is a company policy related to how much the amount of debt that a company will use as a source of funding (Martha & Lena, 2017). Many things need to be considered so that the debt they have can help the company in improving their operation activities, because the wrong debt management can make the company suffer loses in the future. The higher debt proportion set by the company at a certain level means the higher firm value. But, if the amount of debt has exceeded the defined proportions, then the firm value can be decrease.

Research conducted by Martha & Lena (2017) shows that debt policy has a positive effect on firm value. This result is in line with Parminto, et al (2016) and Setiadarma & Machali (2017) which state that debt policy has a significant positive effect on firm value.

This research aims to reexamine the effect of dividend policy and debt policy on firm value.

2. THEORETICAL FRAMEWORK AND HYPO THESES

Firm value
The firm value is the perception of shareholders related to the success of a company, which can be reflected in the price of outstanding shares on the stock market. Firm value is also the price that a buyer willing to pay if the company is sold.

The higher firm value, the higher the investor’s interest in the company’s shares. That is because a high firm value indicates a high level of shareholder’s prosperity (Martha & Lena, 2017). In addition, high firm value can increase market confidence in current and future company performance.

Firm value can be measured through stock’s price by using valuation ratio. According to Sudana (2011), valuation ratio is a ratio associated with evaluating the performance of company’s shares that have been traded on capital market. This valuation ratio shows how much the company valued by the potential investors, so that they are interested in buying shares at the higher price than the book value.

Dividend Policy and its effect on Firm Value
Dividend policy is the percentage of profit paid to shareholders (Harmono, 2014). Dividend policy is related to the use of profits which are the right of shareholders, whereby the company’s profits can be distributed as dividends or retained to be reinvested.

Brigham & Houston (2011) stated that there are several theories explaining the relationship between dividend policy and firm value, including Signalling Theory, Irrelevance Theory, Bird in the Hand Theory, dan Tax Preference Theory.

Signalling Theory explains that the dividend paid by a company is a signal to shareholders related to the company’s current performance and future prospects (Esana & Ari, 2017). An increase in dividends paid is considered good news for shareholders, because it indicates that the company is in a good condition, as well as the company’s prospects for the future. So, this theory shows that dividend policy has a positive effect on firm value.

Dividend Irrelevance Theory states that the firm value is not determined by the amount of dividend payout ratio, but it is determined by the company’s ability in managing its assets in order to generate profits. This means that dividend policy does not have effect on firm value.

Bird in the Hand Theory is compared to one bird in the hand is more valuable than a thousand
birds in the air. The bird in the hand is meant to be a dividend, while the thousand birds in the air are capital gains, which is the profit gained from the difference between the selling price and the purchase price of a stock. This theory states that dividends from owned shares can provide more certainty than "one thousand” capital gain in the capital market. This is because the stock price in the capital market is always changes, so that the capital gains can also change, even the investor can get capital loss if there’s a mistake in predicting a stock. According to this theory, if a company pays high dividends to their investors, the firm value will also be higher in the investor’s point of view. This shows that dividend policy can positively affect the firm value.

**Tax Preference Theory**, also known as Tax Differential Theory, states that there are differences in tax rates between capital gains and dividends. Generally, the tax rate of capital gains is lower than the dividends tax rate. That is the reason why investors prefer capital gains to dividends. The higher dividend received by the investors means the higher tax that must be paid, so that investors do not feel happy about the existence of dividends which is have an bad impact on firm value. Based on this explanation, there is concluded that dividend policy has a negative effect on firm value, because the higher the dividends paid, the lower the investor’s valuation of the company.

Based on Signalling Theory, an increase in dividends paid is considered good news for shareholders, because it indicates that the company is in a good condition, as well as the company’s prospects for the future. So, this theory shows that dividend policy has a positive effect on firm value. Based on the explanatory in Bird in the Hand Theory, the results are obtained that if the companies pay high dividends to investors, the firm value is also increase. Therefore, it can be conclude that dividend policy of a company can positively affect the value of the company.

Both theories are supported by researches conducted by Parminto, et al (2016) dan Rehman (2016) which state that dividend policy has a significant positive effect on firm value. In line with these results, researches conducted by Esana & Ari (2017) dan Martha & Lena (2017) also found that dividend policy had a positive effect on firm value.

Based on the theory and empirical review, the first research hypothesis can be formulated:

H1: Dividend policy has a significant positive effect on firm value

**Debt policy and its effect on Firm Value**

Debt policy is a decision taken by managers regarding the amount of debt that a company can have to fund its operational activities. Debt policy will encourage managers to be more careful in using debt, both in the short and long term debt.

There are several theories that provide explanations related to debt policy, two of them are Pecking Order Theory dan Trade Off Theory. Pecking Order Theory explains that companies tend to look for sources of funding with low rsk (Myers & Majluf, 1984). Pecking Order Theory assumptions are : (1) Companies tend to prefer internal funding rather than external funding. Internal funding can be obtained from retained earnings from business operations. (2) If external funding is needed, companies tend to choose to issue the safest securities first, those with the lowest risk to high-risk securities, such as bonds, preferred shares, and ordinary shares. (3) Establish dividend payment that tend to be constant, where the amount of dividends paid is not affected by how much profit or loss the company has.

The Trade Off Theory according to Myers & Majluf (1984) explains that the company will owe or take a debt to a certain level of debt, that is when the tax savings from additional debt cost are equal to the cost of financial distress. This means that companies with high profitability will try to reduce their taxes by increasing the value of the debt ratio, thus the additional debt cost can be used to reduce taxes.

Brigham and Houston (2011) provide some explanations related to trade-off theory as follows: (1) Debt can provide tax benefits, where by using more debt can reduce the tax. (2) Company’s debt ratio target is less than 100% in order to reduce the potential of bankruptcy. (3) The capital structure of each companies are different depending on business risk and bankruptcy costs. Capital structure will be optimal if it can maximize the stock’s price. Based on this theory, each company has their respective consideratons in fulfilling the funds need, based on the capabilities of the company.

Based on pecking order theory, the company will fulfill the funding needs by prioritizing internal funding first. If the internal funding has not been sufficient, the company will use external source to fulfill the funding needs, which is by debt. The existence of these debts can make potential investors assume that the company is experiencing a lack of funds and the company’s profits are insufficient. This can impact the firm
value, where the potential investors consider that the company is in a bad condition so that their interest in company’s shares is low. Therefore, the high debt held by the company can cause the value of the company decrease.

These explanations are supported by researches conducted by Parminto, et al (2016) and Setiadharma & Machali (2017) which stated that dividend policy has a significant negative effect on firm value.

The high level of debt owned by a company does not necessarily indicate that the company is in a bad condition. The trade-off theory explains that one of the goals of companies in using debt is to reduce the amount of tax paid. The reduced tax that must be paid can make the company’s profits increase. Increased profits can indicate that the company is in a good condition and can have an impact on the stock’s price increases. This can explain that debt policy has a positive effect on firm value.

A similar explanation is found in Martha & Lena (2017) research which shows that debt policy has a positive effect on firm value. Research conducted by Rehman (2016) also shows that capital structure, in this research is debt policy, has a positive effect on firm value. Based on the theory and empirical review, the second of research hypothesis can be formulated:

H2: Debt policy has a significant positive effect on firm value

<table>
<thead>
<tr>
<th>Dividend Policy</th>
<th>H1 (+)</th>
<th>Firm Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debt Policy</td>
<td>H2 (+)</td>
<td></td>
</tr>
</tbody>
</table>

Picture 1

Theoretical Framework

3. RESEARCH METHOD
Data, Sample, and Sampling Technique
The type of data used in this research is secondary data. Secondary data sources are annual financial statements.

The population in this research consists of non financial firms listed in Indonesian Stock Exchange period 2013-2017. Sampling method used in this research is purposive sampling, which is selecting samples based on criterias defined by the researcher (Anwar Sanusi, 2011), as follows:

1. Firms listed in LQ 45 for five years in period 2013-2017
2. Firms in non financial sector
3. Firms that have positive equity
4. Firms that pay dividend to investors

There are 120 observations from 24 firms listed in LQ 45 for five years in period 2013-2017. After selecting sample based on defined criteria, there are some firms that didn’t pay dividend to their investors. So, this research has 73 observations that can be processed.

Research Variables and Measurement
The variables used in this research are firm value as the dependent variable. Dividend policy and debt policy are the independent variables.

1. Firm value
Firm value is the perception of shareholders related to the success of a company, which can be reflected in the price of outstanding shares on the capital market. In this research, firm value will be measured by Price to Book Value (PBV). PBV can be calculated by dividing price per share with the book value per share. The higher the PBV value indicates that the shares sold have high prices and much in demand by the investors, so that the firm value will increase.

\[
PBV = \frac{\text{Market price per share}}{\text{Book value per share}}
\]

2. Dividend Policy
Dividend policy is the percentage of profits paid to shareholders. In this research, dividend policy is measured using the Dividend Payout Ratio (DPR). The DPR shows the amount of dividends paid to the company’s total net income.

\[
DPR = \frac{\text{Dividend per share}}{\text{Earning per share}}
\]

3. Debt policy
Debt policy is a decision taken by the manager regarding the amount of debt that will be used to fund the company’s operation activities. In this study, debt policy will be measured using the value of Debt to Equity Ratio (DER). The company is in a good condition if the DER value is not too high.

\[
DER = \frac{\text{Total Debt}}{\text{Total Equity}}
\]
Data Analysis Technique
The statistical analysis used in this research is multiple regression analysis (ordinary least square) by using Eviews as analysis tool.

4. DATA ANALYSIS AND DISCUSSION
Descriptive Analysis Result
Descriptive analysis result summary is presented in Table 1:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>DER (x)</td>
<td>0.741</td>
<td>0.150</td>
<td>2.270</td>
</tr>
<tr>
<td>DPR (%)</td>
<td>47.247</td>
<td>3.648</td>
<td>106.688</td>
</tr>
<tr>
<td>PBV (x)</td>
<td>3.632</td>
<td>0.220</td>
<td>27.350</td>
</tr>
</tbody>
</table>

Source: Data processed by Eviews 10

Based on Table 1, it can be seen that DER average is 0.741. It means that 74.1% of company funding comes from debt, which is companies use more debt rather than their own capital. Next, DPR average is 47.247%, which means that the company’s profits distributed as dividends to shareholders is quite high. The value of PBV average is 3.632. It indicates that investors value the company more than 3,632 from what was expected.

Regression Analysis Result
The research model is as follows:

\[ Y(t) = c_0 + c_1 \cdot \text{DPR}(t) + c_2 \cdot \text{DER}(t) + \epsilon_t \]

\[ \text{PBV}(t) = c_0 + c_1 \cdot \text{DPR}(t) + c_2 \cdot \text{DER}(t) + \epsilon_t \]

Information:
- \( Y \) = Firm value
- \( X_1 \) = Dividend Policy
- \( X_2 \) = Debt policy
- \( c \) = Regression Coefficient
- \( \epsilon_t \) = error term

Result of Multiple Regression Analysis
The result of multiple regression analysis are shown in table 1. Based on the results of data processing with Eviews program, the regression equation used in this research is as follows:

\[ \text{PBV}(t) = -2.209 + 2.552 \cdot \text{DER}(t) + 0.041 \cdot \text{DPR}(t) + \epsilon_t \]

Determination Coefficient Test (R²)
The Adjusted R Squared is 0.8748 or 87.48%. It shows that firm value as the dependent variable can be explained by two independent variables: dividend policy and debt policy equal to 87.48% while the rest 12.52% was explained by other factors outside the research model.

Analysis Variance (F-test)
Based on testing criteria from the results of data processing with Eviews program, it can be seen that \( F_{count} \) result is 18,172 > 3.69 or \( F_{count} \geq F_{table} \), and significance value is 0.000 < 0.005 (H_o rejected). So, it can be said that dividend policy and debt policy as together have a significant effect on firm value.

Table 2
Multiple Regression Analysis Result

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>t-count</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constanta (C)</td>
<td>-0.209</td>
<td>0.082</td>
<td></td>
</tr>
<tr>
<td>Dividend Policy (DPR)</td>
<td>0.041</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>Debt Policy (DER)</td>
<td>2.552</td>
<td>0.155</td>
<td></td>
</tr>
</tbody>
</table>

\[ F = 18,172 \]
\[ \text{Sig} F = 0.000 \]

R-squared = 0.8748
Adjusted R-squared = 0.8266

Hypothesis Test and Discussion
1. The Effect of Dividend Policy on Firm value
Based on table 1, it can be seen that \( t_{count} \) result is 4.366 > 1.64 or \( t_{count} > t_{table} \) and significance value is 0.000 < 0.05 so \( H_0 \) is rejected. It means that dividend policy has significant positive effect to firm value.
To determine the direction of the hypothesis, beta shows the number 2.552 means the direction of the dividend policy variable has positive direction.
The higher the Dividend Payout Ratio of the company, the higher the firm value according to investors. This explanation matches with signalling theory which explains that an increase in dividends is considered good news for shareholders, because it indicates that the company is in a good condition, so
does the company prospect for the future. This results support the Bird in the Hand Theory which states that investors prefer dividends over capital gains. Returns in the form of dividends are more certain than capital gains. Thus the high dividend distribution will attract investors to invest funds in the company, so the demand for shares will increase. If this happens, than the share’s price will increases and ultimately the firm value will also increases.

The results of this study also support research conducted by Parminto, et al (2016) and Rehman (2016) which state that dividend policy has a significant positive effect on firm value.

In line with these results, research conducted by Esana & Ari (2017) dan Martha & Lena (2017) show that dividend policy has a positive effect on firm value.

2. The Effect of Debt policy on Firm value

Based on table 1, it can be seen that t count result is 1,436 < 1,64 or t count < t table and significance value is 0,1554 > 0,05 so H0 is accepted. The results show that debt policy has no effect on firm value.

This result does not support the two theories about debt policy, namely pecking order theory and trade-off theory. This means that the large proportion of debt to capital owned by a company will not affect the size of the firm value. This indicates that how much and from where the source of funds used by the company does not have an impact on investor’s interest to invest their funds in the company. Investors think more realistically by seeing how much dividends will be received, not from where the source of funds used by the company. Thus, the Pecking Order Theory and Trade Off Theory were not successfully proven in this study.

The result of this study does not support Martha & Lena (2017) research which states that debt policy has a positive effect on firm value.

This result is also not in line with research conducted by Rehman (2016) that shows capital structure, in this case is debt policy, has a positive effect on firm value.

5. CONCLUSION, IMPLICATION, SUGGESTION, AND LIMITATIONS

Based on the results in this study, it can be concluded that dividend policy has a significant positive effect on firm value. It means that the higher the Dividend Payout Ratio of the company, the higher the firm value according to investors. This study also shows that debt policy does not significantly affect the firm value. It means that the amount of debt does not determine the increase or decrease of firm value.

This results imply that the importance of the company in making optimal dividend decisions, in order to give a positive signal to the market so that it attracts investors, which will ultimately increase the firm value.

Suggestion

This research only included two variables affecting firm value, there are dividend policy and debt policy. It is hoped that further researcher can use several variables other than these two variables. It is also hoped for further researcher to increase the period or extend the observation period of the research to reveal different results.

Limitation

There are several limitations in this research. First, this research only uses two variables as the independent variable, there are dividend policy and debt policy. Second, the research period is only five years (2013-2017).

REFERENCES


