

The Effects of Profitability and Solvability on Stock Prices: Empirical Evidence from Indonesia

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Abstract

This study aims to analyze the effect of the ratio of profitability and solvability (leverage) on the variable stock price, which is mediated (intervening) by the variable dividend policy. Using the financial reports of manufacturing companies in the consumer goods sector, we take profitability data (ROA, ROE, GPM, and NPM), solvability data (DAR, LTDER, and DER), dividend policy (DPR), and stock price (closing price) from 24 companies, which were selected as samples, from 2011 to 2018. Data was analyzed using the Structural Equation Modeling (SEM) method. The results show that profitability, solvability, and dividend policy affect changes in stock prices, respectively. On the other hand, profitability and solvability do not affect dividend policy. The indirect relationship (intervening) is assessed using a single test, resulting in a dividend policy that can intervene in the relationship between profitability and stock prices but cannot mediate the relationship between solvability and stock prices. The implication of this research is to provide knowledge to investors about the importance of knowing the company's financial performance. Companies with good financial performance will easily develop because there are sufficient funds for company operations. By analyzing financial ratios, investors can get signals to decide whether to invest in the company they want.

Keywords: Profitability, Leverage, Dividend Policy, Stock Prices

JEL Classification Code : G10, G35, G12

1. Introduction

Investment activities in the form of stocks, deposits, and bonds are growing rapidly in today's society (Clarensia

et al., 2017). Investment means investing in a business and as proof of ownership of company assets. In addition to profit, investors are also faced with uncertainty or risk, that is, when stock price fluctuations occur, the company may suffer losses if the stock price falls. Investors need to consider the feasibility of a company to buy its shares so that the profit can be maximized. The stock price is defined as the closing price of each type of share in the stock market during an observation period whose movements are continuously observed by investors, besides that, the stock price is an indicator that is widely used by investors to find out about changing trends in the capital market (Simbolon, 2018). There are two forms of stock prices, namely the market price or the opening price and the closing price. Investors know the changes in stock prices in general by looking at the movement of the Jakarta Composite Index (JCI); when the index rises, the price of some shares is high and vice versa.

Stock prices change very quickly, they can even change in a matter of seconds. Stock price fluctuations, both joint-stock and individual stock prices, are influenced by macro and micro factors of the company (Rohmawati, 2017).

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The company's macroeconomic effects include the interest rate, currency inflation, politics, and the national productivity level. Several micro factors affect stock prices, namely management performance, product prices, available raw materials, employee performance, and other factors that have an impact on company profits (Jannah & Haridhi, 2016).

A dividend is the distribution of some of a company's earnings to a class of its shareholders, as determined by the company's board of directors. A dividend policy is a policy a company uses to structure its dividend payout to shareholders. Dividend policy is concerned with financial policies regarding paying cash dividends in the present or paying an increased dividend at a later stage (Rakhimsyah & Gunawan, 2011). There are several types of dividends, one of which is non-cash dividends consisting of stock dividends and stock splits (Hanafi, 2018). A stock dividend is a dividend payment to shareholders that is made in shares rather than as cash. The stock dividend has the advantage of rewarding shareholders without reducing the company's cash balance, although it can dilute earnings per share. A stock split is when a company divides the existing shares of its stock into multiple new shares to boost the stock's liquidity (Hanafi, 2018). The interests of the company and the interests of different investors are the cause of conflicts in dividend policies, where companies prefer to use profits for the benefit of the company, and investors expect the company's profits to be distributed as dividends (Putra & Lestari, 2016). Financial performance is broadly reflected by dividend policy (Kanakriyah, 2020). Investors who are not risk-takers will prefer dividends over capital gains - these investors are short-term investors.

Profitability is a measurement of efficiency – and ultimately its success or failure. A further definition of profitability is a business's ability to produce a return on an investment based on its resources in comparison with an alternative investment. We assess profitability using ratios, including ROE (return on equity), ROA (return on assets), NPM (net profit margin), and GPM (gross net profit margin). Solvency is the ability of a company to meet its long-term debts and other financial obligations. Solvency is one measure of a company's financial health since it demonstrates a company's ability to manage operations in the foreseeable future. Investors can use ratios to analyze a company's solvency (Ariyanti & Sulasmiyati, 2016). Brealey et al. (2008) stated that the assessment of the solvability ratio is carried out using the indicators of LTDER (long term debt to equity ratio), DER (debt to equity ratio), and DAR (Debt to asset ratio).

Companies with good and healthy financial performance will be able to generate high profits and fulfill their debt responsibilities on time so that they can also fulfill their obligation to distribute dividends to shareholders. Pattiruhu

and Paais (2020) explained that ROA and DER affected dividend policy. High dividends can attract investors to invest in the shares of a company, and this can also have an impact on increasing the company's stock price. However, this thinking is considered different by some researchers. There are differences regarding the relationship between the variables to be studied.

2. Literature Review

2.1. Signaling Theory

The signaling theory emanates from information asymmetries between firm management and shareholders. Signally theory posits that if managers have inside information, their choice of capital structure will signal information to the market. This theory is a model that uses the capital structure as a signal sent by companies to the capital market. Managers who have confidence in the company's good prospects and want to increase stock prices will spread the news directly to investors (Indradinata et al., 2019). The basis of this theory is the idea that shareholders do not fully have access to company information. Managers have information that is unknown to shareholders, which results in asymmetrical information between the two. The signaling theory states that corporate financial decisions are signals sent by the company's managers to Investors to shake up these asymmetries. These signals are the cornerstone of financial communications policy. When the capital structure changes, shareholders will view the change in value as a sign or signal that can result in changes in company value.

2.2. Stock Price

The stock price is a stock value whose movement is determined by bargaining power on the stock exchange and is the selling price from investors to other investors (Zaki & Islahuddin, 2017). The stock price is also the present value of the cash flows that shareholders will receive in the future. The stock price represents the funds issued to obtain proof of company ownership. A stock price is a given for every share issued by a publicly-traded company. The price is a reflection of the company's value – what the public is willing to pay for a piece of the company. It can and will rise and fall, based on a variety of factors in the global landscape and within the company itself (Dewi & Hidayat, 2019).

The indicator used to describe changes in stock prices is the stock price index which is calculated using the last price or closing price of the stock on the stock exchange. There are several types of stock price indexes, one of which is the composite stock price index (IHSG) which involves all shares listed on the stock exchange whose value is

influenced by the movement of the stock price of companies from various sectors (Sari & Salam, 2019).

2.3. Dividend Policy

Dividend policy determines where the profits will be distributed to shareholders or invested in the company. Another definition is a policy to determine how much profit the company needs to distribute in the form of dividends to shareholders. Dividends assist in providing information about the performance of company management to the capital market so that dividends are seen as a signal for the company's prospects (Deitiana, 2011).

When a dividend increase is the result of improved cash flows, it is often a positive indicator of company performance. Another reason for a dividend hike is a shift in company strategy away from investing in growth and expansion (Murhadi, 2008). The dividend policy is assessed by the Dividend Payout Ratio (DPR). The DPR is the ratio between dividends per share divided by earnings per share. This ratio represents the percentage of profit that will be distributed to shareholders. The higher the DPR determined by the company, the smaller the funds for company operations. The amount of dividend will be announced at the holding of the general meeting of shareholders (GMS) (Deitiana, 2011). Formula:

$$\text{DPR} = \frac{\text{Dividend per share}}{\text{Interest per share}} \times 100\%$$

2.4. Profitability

This ratio is used to assess the company's ability to earn profits with capital, assets, or sales (Agusta et al., 2018). Return on assets (ROA) is an indicator of how profitable a company is relative to its total assets. ROA gives a manager, investor, or analyst an idea as to how efficient a company's management is at using its assets to generate earnings. Return on assets is displayed as a percentage. Formula:

$$\text{RROA} = \frac{\text{Net profit}}{\text{Total assets}} \times 100\%$$

ROE is used to measure the amount of profit that belongs to the owner of capital. ROE signifies how good the company is in generating returns on the investment it received from its shareholders. ROE is an efficient use of company capital, the higher (stronger) the ratio the better the company's position (Sutomo, 2014). Formula:

$$\text{ROE} = \frac{\text{Net profit}}{\text{equity}} \times 100\%$$

Gross profit margin is a measure of a company's profitability, calculated as the gross profit as a percentage of revenue. Gross profit margin can be a reflection of good business, because the higher the rate of return, the higher the gross profit on net sales received by the company (Zaki & Islahuddin, 2017). Formula:

$$\text{GGPM} = \frac{\text{gross profit}}{\text{sales}} \times 100\%$$

The net profit margin is equal to how much net income or profit is generated as a percentage of revenue. Net profit margin is the ratio of net profits to revenues for a company or business segment. Net profit margin is an indicator that shows the amount of net profit obtained from sales (Ichsan & Taqwa, 2013). Investors need to know the company's ability to generate profits, assess whether a company is profitable or not. Formula:

$$\text{NPM} = \frac{\text{Net profit}}{\text{sales}} \times 100\%$$

2.5. Solvability

Solvability or leverage is the company's ability to fulfill its financial obligations when the company is liquidated. The debt to asset ratio (DAR) is an indicator used to measure total debt and total assets, or it can be used to measure the debt to asset ratio (DER) (Kanakriyah, 2020). Formula:

$$\text{DDAR} = \frac{\text{Total debt}}{\text{Total assets}} \times 100\%$$

The ratio of debt to long-term equity is an indicator for measuring long-term debt compared to equity, or the share of equity that is used as collateral for long-term debt. Formula:

$$\text{LTDER} = \frac{\text{Long term debt}}{\text{equity}}$$

The debt to equity ratio (DER) is a financial ratio indicating the relative proportion of shareholders' equity and debt used to finance a company's assets. The use of DER (debt to equity ratio) aims to obtain a higher profit than the fixed cost that must be paid (Ariyanti & Sulasmiyati, 2016). Formula:

$$\text{DER} = \frac{\text{Total debt}}{\text{equity}} \times 100\%$$

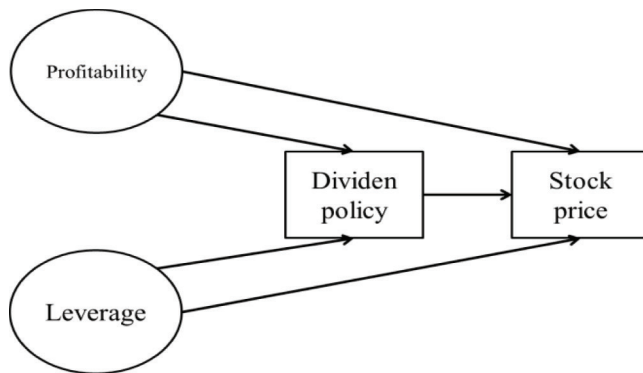


Figure 1: Research Empirical Model

2.6. Conceptual Framework

The framework above is an illustration of this research, which focuses on changes in stock prices as the dependent variable. The stock price can change over time. The independent variables are profitability and solvability that affect the change of stock price. Dividend policy appears as an intervening/mediating variable to strengthen or even weaken the relationship between dependent and independent variables indirectly. The following hypotheses are formulated:

- H1: dividend policy affects stock price.*
- H2: profitability affects stock price.*
- H3: leverage affects stock price.*
- H4: profitability affects dividend policy.*
- H5: leverage affects dividend policy.*
- H6: profitability affects stock price through dividend policy.*
- H7: leverage affect stock price trough dividend policy.*

3. Research Methodology

This is a type of explanatory research. This research uses a quantitative descriptive approach. This study uses a population in the form of shares in companies in the consumer goods sector listed on the Indonesia Stock Exchange (BEI). The data used is in the form of company financial reports and sourced from idx.co.id (the official website of the Indonesia Stock Exchange) and the official website of each company. Analysis using structural equation models (SEM) or statistical methods is used to solve a multilevel model simultaneously which cannot be solved by linear regression equations and is performed using AMOS 21.

4. Results and Discussion

4.1. Descriptive Statistics Variable

Descriptive statistics are brief descriptive coefficients that summarize a given data set, which can be either a

representation of the entire or a sample of a population. Descriptive statistics are broken down into measures of central tendency and measures of variability (spread). Descriptive statistics describe a data set with maximum, minimum, mean, and standard deviation values. The data is described to make it easier to find more detail. This study uses data from manufacturing companies, especially in the consumer goods sector, with a total of 192 samples from 24 companies that go public and publish annual reports from a period of 8 years, or from 2011 to 2018.

Table 1 shows that the minimum value of ROA is –15.50% and the maximum value is 92.10%. The minimum value does not meet the standard ROA industry ratio, which is 30% (Kasmir, 2008). The minimum value of ROE is –108.66% and the maximum value is 224.46%. The low ROE value implies that the company is not very efficient in generating profit for shareholders. Low ROE indicates a company may be mismanaged and could be reinvesting earnings into unproductive assets. ROE is more than a measure of profit; it is also a measure of efficiency. The minimum value does not meet the standard ROE industry ratio, which is 40%.

Table 1 shows that the minimum value of GPM is 2.35% and the maximum value is 73.88%. The maximum value exceeds the standard GPM industry ratio of 24.90% (Lukviarman, 2006). A high GPM reflects how successful a company's executive management team is in generating revenue, considering the costs involved in producing their products and services. A higher GPM means the company has more cash to pay for indirect and other costs such as interest and one-time expenses. Table 1 shows that the minimum value of NPM is –13.00% and the maximum value is 699.00%. The minimum value does not meet the standard NPM industry ratio, which is 20%. A low NPM means that a company uses an ineffective cost structure and/or poor pricing strategies. Therefore, a low ratio can result from inefficient management, high costs (expenses), and weak pricing strategies.

The solvability variable is measured by the ratio of DAR, LTDER, and DER. Table 1 shows that the minimum value DAR is 0.10% and the maximum value is 5.21%. A low DAR means the company owns more assets than liabilities and can meet its obligations by selling its assets if needed. The lower the debt to asset ratio, the less risky the company. Moreover, a low DAR means the company is able to minimize debt, as such, that it does not have an impact on reducing profits to be distributed to shareholders. A high DAR indicates that a company may be putting itself at risk of defaulting on its loans if interest rates were to rise suddenly. The company with the highest DAR value means it owns more liabilities than assets. It indicates that the company is extremely leveraged and highly risky to invest in or lend to. Table 1 shows that the minimum value of LTDER is –444.80% and the maximum value is 414.37% owned by the same company. The LTDER is a method

Table 1: Descriptive Statistics of Research Variables

Variable	N	Minimum	Maximum	Mean	Std. deviation
ROA	192	−15.50	92.10	11.68	12.70
ROE	192	−108.66	224.46	20.88	32.74
GPM	192	2.35	73.88	31.25	16.18
NPM	192	−13.00	699.00	16.02	51.20
DAR	192	0.10	5.21	0.57	0.62
LTDER	192	−444.80	414.37	19.96	59.23
DER	192	−8.34	9.47	0.93	1.35
DPR	192	−1.97	4.92	0.42	0.52
Stock Price	192	119.35	75,409.27	5,373.32	11,892.83

used to determine the leverage that a business has taken on. When the ratio is comparatively high, it implies that a business is at greater risk of bankruptcy, since it may not be able to pay for the interest expense on the debt if its cash flows decline. This is more of a problem in periods when interest rates are increasing, or when the cash flows of a business are subject to a large amount of variation, or when an entity has relatively minimal cash reserves available to pay down its debt obligations.

Table 1 shows that the minimum value of DER is −8.34% and the highest value is 9.47%. A high DER is often associated with high risk; it means that a company has been aggressive in financing its growth with debt. If a lot of debt is used to finance growth, a company could potentially generate more earnings than it would have without that financing. A low DER indicates a lower amount of financing by debt via lenders, versus funding through equity via shareholders. Lenders and investors usually prefer low debt-to-equity ratios because their interests are better protected in the event of a business decline.

Table 1 shows that the highest dividend value is 4.92% and the lowest dividend value is −1.97%. DPRs measure how much a company pays out in dividends relative to its earnings and the market value of its shares. A high DPR means that the company is reinvesting less money back into its business while paying out relatively more of its earnings in the form of dividends (Devi & Erawati, 2014). The highest closing stock price was Rp. 75,409.27 and the lowest was Rp. 119.35, which means the company received the highest demand due to the company's good performance.

4.2. Sample Feasibility Test

Sampling was done using the purposive sampling method. Purposive sampling is a sampling technique in which the researcher relies on his/ her own judgment (pre-defined criteria) when choosing members of the population

to participate in the study. Hair et al. (2010) explained that the minimum sample size must be 5 times the number of research indicators; as such, the sample size should be 100 to 200 samples. This study uses 8 research indicators and the sample used for this study was 192 samples, which means that it meets the standard.

4.3. Outlier Test

An outlier is a data point that differs significantly from other observations. An outlier may be due to variability in the measurement or it may indicate the experimental error; the latter are sometimes excluded from the data set (Imam, 2011). Outlier data is detected using the boxplot (Box and Wikher plot) and the Mahalanobis distance criteria. The first outlier test is carried out using the box plot criteria which describes the form of data distribution (skewness/diversity). Box plot diagram also termed Whisker's plot is a graphical method typically depicted by quartiles and inter quartiles that helps in defining the upper limit and lower limit beyond which any data lying will be considered as outliers. The second step, namely testing the outliers with the Mahalanobis distance. Mahalanobis distance provides a way to measure how similar some set of conditions is to a known set of conditions. It accounts for the covariance among variables. Tests are carried out using the AMOS application. Outlier data can be seen from the p_1 and p_2 values, wherein the conditions must be greater than 0.05 (Ferdinan, 2000).

4.4. Normality Test

Normally distributed data can be seen on the CR (critical ratio) value of skew and kurtosis which must be less than 2.58 (Ullman, 2006). The ROE indicator cannot be said to be normal in univariate ways, because the CR skew value is at a value of 4.26 which is greater than 2.58. A good multivariate value is 0.379 and less than 2.58,

so the data in this study is said to be normal and can be used for further research.

4.5. CFA Test (Confirmatory Factor Analysis)

Confirmatory factor analysis (CFA) is a multivariate statistical procedure that is used to test how well the measured variables represent the number of constructs. Indicators that are able to form constructs are measured by the size of the weight of the coefficient (loading) factor, which must be at least >0.5 to be considered feasible to reflect the variable (Hair et al., 2010).

Table 2 displays the results of the CFA test. For profitability variables - GPM is 0.39 and NPM is 0.45 - which does not meet the minimum loading factor weight. Factor loadings are correlation coefficients between observed variables and latent common. Factor loadings are used in factor analysis by researchers who wish to see how a number of variables measure a particular concept. Factor loadings are scaled from 0 to 1 and are essentially coefficients that tell us how strong the relationship is between the variable and the factor. After the ROA is removed, in stage two, new values appear with an ROE of 0.77, a GPM of 0.55, and an NPM of 0.63, which is deemed feasible to reflect the profitability variable.

The results of the CFA test for the solvability (leverage) variable are shown in Table 4. The indicators DAR, LTDER, and DER show that they are feasible and meet the weights of stage 1, and do not change when stage 2 is carried out. The DER is 0.58, LTDER is 0.56, and DER is 0.81. Even though the values have changed in stage 2, the value is still feasible and has met the minimum loading factor weight.

Table 2: CFA Test for Profitability Variables

Variable	Loading factor		Inf.
	1 st step	2 nd step	
ROA	0.99	–	Erase
ROE	0.86	0.77	Fit
GPM	0.39	0.55	Fit
NPM	0.45	0.63	Fit

Table 3: CFA Test for Solvability Variable

Variable	Loading factor		Inf.
	1 st step	2 nd step	
DAR	0.52	0.58	Fit
LTDER	0.51	0.56	Fit
DER	0.91	0.81	Fit

Table 4: The Goodness of Fit (GoF) Test Results for the Full SEM Model

Measurement of GoF	Critical Value	Result
Probabilities	≥ 0.05	0.050
Chi-square	24.9958	24.994
CMIN/DF	≤ 2.00	1.666
CFI	≥ 0.95	0.935
TLI	≥ 0.90	0.878
RMSEA	≤ 0.08	0.080
GFI	≥ 0.90	0.944
AGFI	≥ 0.90	0.866

Table 5: Results of The Regression Weight Hypothesis Value Output

Correlation	Estimate	C.R.	P
Dividend policy \leftarrow Solvability	0.057	0.913	0.361
Dividend policy \leftarrow Profitability	0.013	1.927	0.054
Stock prices \leftarrow Dividend policy	0.568	4.036	0.000
Stock prices \leftarrow Solvability	0.194	2.142	0.032
Stock prices \leftarrow Profitability	0.059	3.771	0.000

4.6. Evaluation of GOF (goodness of fit) Criteria

The data for each variable that has been tested is then combined with CFA (confirmatory factor analysis) to analyze SEM in a full model (Susilo et al., 2018). The SEM model is assessed by the criteria of goodness of fit as a testing tool for whether or not the data is suitable with the research model. Model testing is done using AMOS.

The results of testing the fit model with GoF criteria are shown in Table 4. It shows that two indicators are marginal or close. The overall GoF measure is shown in Table 4, which means that the theoretical model with the sample has a good fit. The dimensions on which the dependent and independent variables are formed are considered appropriate, and the model in this study is acceptable.

4.7. Structural Equation Models

The results of the GoF criteria show good results and the model is accepted. The next step is to test the direct construct relationship indicated by the regression weight value in the output table in the AMOS application (Irianto et al., 2015). The CR value from the results of data analysis was compared with a significance level or p less than ≥ 0.05 and a critical

Table 6: Results of the Single Test Value (Indirect Relationship)

Mediasi	Nilai estimasi	Std. error	p-value
$X_1 \rightarrow Z \rightarrow Y$	0.221; 0.324	0.031	0.021
$X_2 \rightarrow Z \rightarrow Y$	0.111; 0.324	0.025	0.162

value of more than ≥ 2.00 (Hair et al., 2010) as a condition that the proposed hypothesis can be accepted and has a significant effect.

Based on Table 7 above, the conditions are described as follows:

- The solvability ratio is not significant for dividend policy.
- The profitability ratio is not significant to dividend policy.
- The dividend policy variable is significant to the stock price variable.
- The solvability ratio is significant to the stock price variable.
- The profitability ratio is significant to the stock price variable.

4.8. Intervening Variable Sobel Test (Mediation)

For testing the indirect relationships, we use the Sobel test to determine whether a variable carries (or mediates) the effect of an independent variable to the dependent variable, that is, analyze the relationship of intervening variables, as a mediator of the independent and dependent variables (Mahmud, 2020). The Sobel test was performed using a single test calculator which is accessed online. The critical value for the p-value is expected to be less than the significance value (alpha) of 0.05 so that the proposed hypothesis can be accepted (Tangke & Habbe, 2017).

The results of testing the effect of mediation in Table 7 above, states that:

- Dividend policy (Z) is able to mediate the relationship between profitability ratio (X1) and stock price variable (Y).
- Dividend policy (Z) is not able to mediate the relationship between solvability ratio (X2) and stock price variable (Y).

4.9. Hypothesis Testing

- Hypothesis 1 (H1): dividend policy can positively affect stock prices, meaning that the higher the dividend value distributed to shareholders, the higher the stock price.

- Hypothesis 2 (H2): profitability is proven to positively affect the stock price variable, meaning that the higher the company generates profits, the higher the stock price in the capital market.
- Hypothesis 3 (H3): there is a positive and significant relationship between the solvability ratio and the stock price variable, meaning that the better the company's ability to manage its debts, the higher the stock price will be.
- Hypothesis 4 (H4): the profitability ratio does not affect the dividend policy variable, meaning that it does not affect the company's decision to determine its dividend policy.
- Hypothesis 5 (H5): the solvability ratio has no effect on the dividend policy variable, meaning that the company's ability to manage its debts does not affect the company in terms of dividend distribution to shareholders.
- Hypothesis 6 (H6): the dividend policy variable can mediate the relationship between the profitability ratio and the stock price variable, meaning that the profitability ratio has a significant effect on the stock price variable.
- Hypothesis 7 (H7): the dividend policy variable cannot mediate the relationship between the solvability ratio and the stock price variable.

5. Discussion

5.1. Effect of Dividend Policy on Stock Prices

Dividend policy positively and significantly has a direct relationship to stock prices, which means that hypothesis 1 (H1) can be accepted. The results of this decision are supported by research by Ainun, (2019) who stated that the dividend policy is distributed to realize investors' desire for dividends and to attract investor interest. Satisfied investors will cause an increase in stock prices and a high demand for company shares. Other studies that support the results that dividend policy has a positive effect on stock prices are Sakia (2019), Irman et al. (2020), and Prayogiyanto et al. (2020).

5.2. Effect of Profitability on Stock Prices

Profitability, which is referred to as the company's ability to generate profits, is concluded to have a direct and significant positive relationship to stock prices, which means that hypothesis 2 (H2) can be accepted. The high percentage of ROE, GPM, and NPM means that the company is able to generate profits well. This is a good signal for investors because the company can provide a return on their capital and can attract investors to buy shares in the company so

that the stock price will increase (Aldini & Andarini, 2018). Other studies that support this result are Saprudin (2019), Dewi and Hidayat (2019), and Indahsafitri et al. (2018).

5.3. The Effect of Solvability on Stock Prices

The results of the study indicate that there is a positive and significant relationship between the solvability ratio and the stock price variable, which means that hypothesis 3 (H3) is accepted. Companies that are growing will usually have a high level of debt and this will affect the increase in stock prices if the company is successful in increasing the company's performance with this debt (Brealey et al., 2008). The positive effect of solvability on stock prices is supported by research by Putranto et al. (2019) who stated that a high percentage of solvability will be able to increase stock prices. Another supporting research is by Hanie and Saifi (2018).

5.4. Effect of Profitability on Dividend Policy

The profitability ratio is not significant to dividend policy, which means that there is no direct influence between the two, and hypothesis 4 (H4) is rejected. Companies with low profits will not always hold back their profits for operating purposes. Many companies also continue to distribute dividends to shareholders for the good image of the company in the eyes of investors. Research that supports this result is by Mudzakar (2019) and Anam et al. (2016).

5.5. The Effect of Solvability on Dividend Policy

The results of hypothesis testing state that solvability has no effect on dividend policy and hypothesis 5 (H5) is rejected. The solvability ratio is a concern for creditors with regard to the certainty of long-term returns on capital, however, for dividend policies are only distributed to shareholders; the solvability ratio will not affect investment decisions as long as the company's performance is in good condition. Research that supports this result is by Mointi and Rina (2019) and Putra et al. (2018).

5.6. Effect of Profitability on Stock Prices with Dividend Policy as An Intervening Variable

The results of testing the indirect or intervening relationship with Sobel stated a significant value, therefore, it was concluded that the dividend policy variable was able to mediate the relationship between the profitability ratio and the stock price variable, and hypothesis 6 (H6) was accepted. Research that supports this result is by Vianti et al. (2019), Mery et al. (2017), and Junaidi et al. (2017).

Companies that pay dividends on an ongoing basis will be able to increase stock prices because many investors are interested in investing with the hope of good returns in the future. The increase in stock prices will be capital for the company to increase production activities and increase profits on the products produced (Rahmawati & Amboningtyas, 2017). Dividend policy can increase stock prices when the value of profitability is high, conversely, it can decrease stock prices when the value of profitability decreases (Mery et al., 2017).

5.7. The Effect of Solvability on Stock Prices with Dividend Policy as An Intervening Variable

The results of testing the indirect or intervening relationship with Sobel stated an insignificant value, therefore, it was concluded that the dividend policy variable was not able to mediate the relationship between the solvability ratio and the stock price variable, and hypothesis 7 (H7) is rejected. In this study, the proportion of large or small debt does not affect the distribution of dividends to shareholders. The company continues to pay dividends to shareholders as a fulfillment of obligations, and to increase the company's stock price, the company only needs to do debt management properly. Other previous studies that support this result are Sriwahyuni and Wihandaru (2016), Oktaryani et al. (2016), Junaidi et al. (2017), and Lapien and Dewi (2018).

6. Conclusion

Based on what has been described in the discussion points, the conclusions of the research results that can be conveyed are:

- a. The dividend policy is proven to be significant on stock prices with a positive direction, where when the dividend policy increases, the stock price will tend to increase.
- b. Profitability proved to be significant on stock price with a positive direction, meaning that when the profitability value increases, the stock price will increase.
- c. Solvability proved to be significant on stock price with a positive direction, meaning that when the solvability value increases, the stock price will increase.
- d. Profitability is proven to have no effect on dividend policy.
- e. Solvability is proven to have no effect on dividend policy.

- f. Dividend policy is proven to significantly mediate the relationship between profitability and stock prices.
- g. Dividend policy does not mediate the relationship between profitability and stock prices.

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