

Effect of Profitability and Solvency on Stock Prices with Dividend Policy as An Intervening Variable

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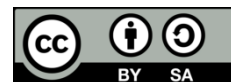
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ABSTRACT

Research has the goal of being known and significantly analyzed whether stock prices gain influence from profitability and solvency through dividend policies by using several research variables to be analyzed, namely profitability and solvency ratios as free variables, stock prices as bound variables and the varied role of mediation using dividend policies. In this study the stock price used is the annual stock closing price, profitability is represented by ROA, solvency is represented by DER, and dividend policy is represented by DPR. The sample used as many as sixteen companies that always follow the LQ45 election. Analyze the data obtained using Structural Equation Modeling Partial Least Square with the help of Smart PLS 3.2.9 analysis tool. The study found that stock prices did not have a significant influence on profitability, DER and dividend policies. While on the dividend policy is considered unsuccessful to mediate the relationship of ROA and DER to the stock price.

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1. INTRODUCTION

The capital market acts as an intermediary which is a container of buying and selling activities by parties who trade stocks, bonds, or other stocks and need the funds with various parties who are excess funds. The capital market provides access to the allocation of capital provider funds (investors) with companies that need it both to develop their business and improve their capital structure [1]. Therefore, the capital market also facilitates the realization of the appropriate distribution of funds, in this case, the importance of the position of the capital market as a supporter of the economy [2]. On February 24, 1997, for the first time introduced and issued the LQ45 Index or liquid 45 by the Indonesia Stock Exchange [3]. The LQ45 index is most in- demand and becomes a reference for investors in investing in a company because it is very liquid with the largest capitalization and high trading frequency [4]. This signals a good financial position and growth prospects for the stock. Shares in a company that belongs to this group are called blue-chip stocks [5].

Stock is a letter that has a selling price that indicates that the investor owns the company. This means that when an investor buys a company's shares, he invests as much capital in that company as they buy [6]. When a company makes a sale of some of its shares to the public or the public, it can be interpreted that the ownership of the company is not private but in groups extends to many parties who are members of several people as the founder of the company. And it can also be said that the company has gone public [7]. The stock price is determined by several factors of consideration for the company, including profitability, liquidity,

solvency or leverage, sales growth, and dividends. Dividends paid by the company are given to investors when the company gets profits and the dividend policy has the goal as a determinant of the level of profit to be distributed as dividends [8]. While the dividend policy can be represented by the DPR ratio (dividend payout ratio). Profitability is a benchmark for the assessment of the level of performance efficiency in a company in obtaining profits by comparing the profits generated with assets or capital that manifest profits [9]. It generally measures profitability using asset return ratio (ROA), return on equity (ROE), gross net profit margin (GPM), and net profit margin (NPM). Solvency demonstrates a company's competence to control its debts and liabilities. DER or debt-to-equity ratio is one of several indicators needed in estimating the value of solvency ratios [10].

Related to this study, the author will analyze several causes that can influence a stock value, namely the state of the company [11]. In this case, the state of the company is interpreted as the financial position of the company. Reviewing a company's financial statements is a way that is applied to evaluate the level of the economic condition of the company whether good or bad. In addition, the analysis of financial statements to calculate financial ratios includes profitability ratios, solvency ratios, and market ratios as a form of economic performance in a company [12]. The market ratio is a ratio that provides information about the level of an investor or shareholder in assessing the company's issuers so that they are willing to buy the company's shares at a price higher than their book value. DPR, ROA and DER can represent market ratios [13].

This theory describes the relationships that occur between each principal in using agents. Principals are those who have authority in performing actions such as delegating policy authority to agents. The agent is the beneficiary of the principal. Those who are appointed as agents by the principal and have the duty and authority to conduct the management of the company on behalf of shareholders are referred to as managers as agents [14]. Signalling theory is a theoretical model that uses capital structure as a signal from the company concerned to the capital market. If the capital structure changes, it is seen as a characteristic or signal that can cause the value of the company to also change. If the information provided by the company to outsiders is of good value then it is considered a positive signal and vice versa, is a negative signal if the company does not have good information about its performance [15].

Profitability is the company's ability to generate profit or profit related to sales, total assets, and capital. Profitability ratios are used to determine a company's capacity and a company's chances of profiting over a given period. The profitability ratio indicator uses return on Investment (ROI), equity return (ROE), earnings per share (EPS), Operating Profit Margin, NPM, and ROA. Profitability ratios are used over time to assess changes in profit. If the profitability indicator continues to increase, then the company's perspective becomes better and leads to the demand for shares to be able to raise the stock price. Solvency or leverage is the capacity of a company to meet its financial obligations [16]. This allocation is measured based on long-term posts including fixed assets and long-term debt. The leverage ratio is the percentage of debt capital used to finance an investment. This ratio includes the total debt-to-asset ratio, the debt-to-equity ratio, the long-term debt-to-equity ratio, and the time's interest earned. DER or debt-to-equity ratio is one of several financial performance benchmark indicators that are used to estimate the use of debt to the total capital of a company's shareholders [17].

Dividend policy is defined that dividends issued by the company as a company decision relate to the division of the amount of profit handled to shareholders or investing it for the construction of the company in another sense how much is also held back by the company as retained earnings [18]. When measuring dividend policy, some investors may want to measure the dividend yield or dividend payout ratio with the Dividend Yield or Dividend Payout Ratio [19]. The trigger for investment by investors to entrust money into the capital market is the stock price because it can reflect the number of capital purchases. The definition of the stock price in question is the stock price that has been recorded every day at the closing time. In connection with this research, the annual stock closing price is used as an indicator to be assessed [20].

2. RESEARCH METHOD

Statistical and systematic procedures are used in conducting this research, having quantitative properties with confirmation of analyzing variables as benchmarks and key materials examined [21]. Research variables used are Profitability & Solvency as a free variable, Stock Price as a bound variable and Dividend Policy as mediation. In this study the stock price indicator used is the annual stock closing price, Profitability is measured by ROA (Return on Asset), Solvency is measured by DER, and Dividend Policy is measured by dividend payout ratio (DPR) [22]. The data collection method used by researchers is secondary where furthermore from the data obtained financial statements needed by researchers in the study [23]. For data

analysis techniques use Structural Equation Modeling Partial Least Square with the help of Smart PLS 3.2.9 analysis tool [24]. The sample in this study was 16 LQ45 companies [25].

3. RESULTS AND DISCUSSION

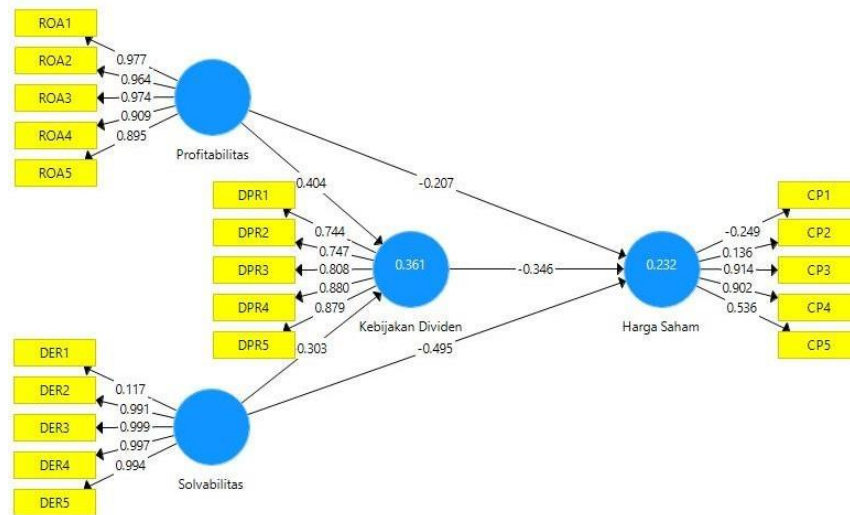


Figure 1: Research Model

Figure 1 shows that there are 4 variables with each variable having 5 indicators in it. Profitability has an indicator that is ROA1 0.977; ROA2 0.964; ROA3 0.974; ROA4 0.909; ROA5 0.895. On the profitability variable, all indicators are declared valid because > 0.70 . Furthermore, solvency variables with indicators namely DER1 0.117; DER2 0.991; DER3 0.999; DER4 0.997; DER5 0.994. The solvency variable of the DER1 indicator with a value of $0.117 < 0.70$ is declared invalid so the indicator must be eliminated because it does not fit the research criteria. Dividend policy variables have indicators namely DPR1 0.744; DPR2 0.747; DPR3 0.808; DPR4 0.880; DPR5 0.879. The five indicators on dividend policy variables > 0.70 so that it is declared valid and meets the criteria in the study. Then the stock price variable has an indicator that is CP1 -0.249; CP2 0.136; CP3 0.914; CP4 0.902; CP5 0.536. Of these variables, there are 3 out of 5 invalid indicators, namely the CP1 indicator with a value of $-0.249 < 0.70$; CP2 $0.136 < 0.70$; CP5 $0.536 < 0.70$ all three indicators will be eliminated because they do not fit the research criteria.

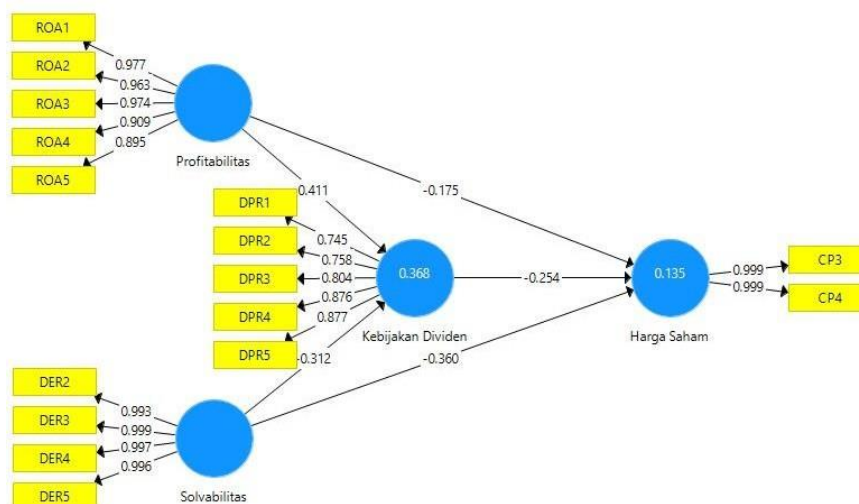


Figure 2. Results of the Research Model

New calculations that are done by not involving previously invalid indicators will produce output as in the exposure of figure 2 above. Based on the results of the recalculation, there are no invalid indicators on the variables of profitability, solvency, dividend policy and stock price, all indicators are declared valid with a value of > 0.70 so that it can be continued to the next stage.

Validity measurement includes testing the level of indicators developed to measure in a study considered good or bad. The higher the value of the indicator, it will also be good in representing questions for research in testing validity on indicators can use away by looking at the relationship between the indicator score and the construct score. Here are convergent validity results:

Table 1. Convergent Validity

Profitability	Solvency	Dividend Policy	Stock price	Profitability
ROA1	0,977	-	-	-
ROA2	0,963	-	-	-
ROA3	0,974	-	-	-
ROA4	0,909	-	-	-
ROA5	0,895	-	-	-
DER2	-	0,993	-	-
DER3	-	0,999	-	-
DER4	-	0,997	-	-
DER5	-	0,996	-	-
DPR1	-	-	0,745	-
DPR2	-	-	0,758	-
DPR3	-	-	0,804	-
DPR4	-	-	0,876	-
DPR5	-	-	0,877	-
CP3	-	-	-	0,999
CP4	-	-	-	0,999

In table 1 it can be known that each reflective indicator in the study already meets the validity standards and the researcher can proceed to the next stage.

3.1 Reliability

Reliability tests are useful to confirm that each indicator used in this study is consistent and reliable. Table 2 shows that each variable index used in the study has consistency and reliability and does not change despite repeated measurements, indicating that each design index is declared reliable and very consistent. Researchers can also make decisions by looking at synthetic trust values that have a $>$ value or equal to the specified standard of 0.70, and all variables have a value of $>$ or equal to the standard already in use. It then compares the Cronbach Alpha value with the study configuration, and the standard Cronbach Alpha value used is 0.60. It can be seen that the value listed in this research variable is already higher than the standard value of the alpha Cronbach set.

Table 2. Reliability Test Results

Construct	Composite Reliability	Cronbach Alpha	Note	Construct
Profitability	0,976	0,969	Reliable	Profitability
Solvency	0,998	0,998	Reliable	Solvency
Dividend Policy	0,907	0,871	Reliable	Dividend Policy
Stock price	0,999	0,998	Reliable	Stock price

3.2 Hypothesis Testing

The results of the output of PLS analysis in this study are as follows.

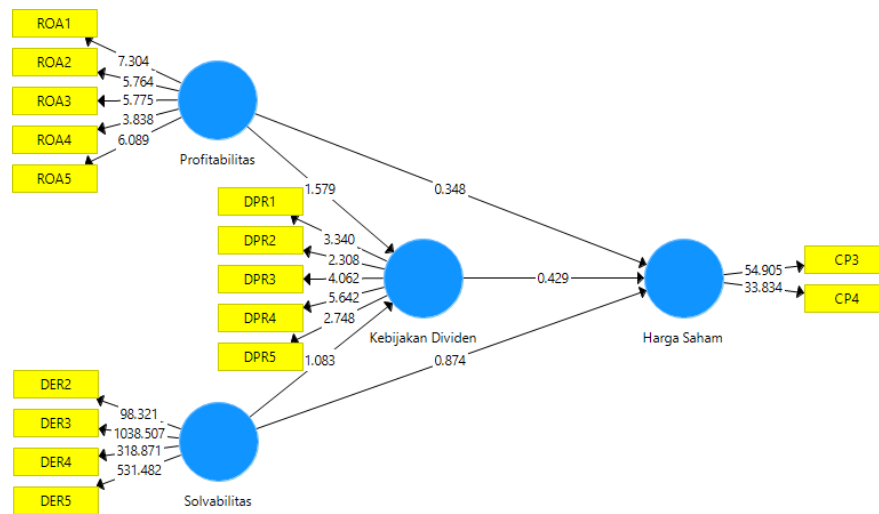


Figure 3. Bootstrapping Results

This study uses two ways of testing hypotheses, namely by directly looking at the relationships between independent variables and dependent variables and looking at the influence indirectly to find out the level of role of intervening variables in mediating the relationship of bound and free variable influences. From figure 3 above can be known the value that is used as an answer to the direct relationship of variables by researchers.

3.3 Direct effect test

A direct effect test is a test to see the level of direct influence values between bound variables and free variables. In this direct influence test how to know the absence of direct influence between variables by looking at the resulting value and so on will be compared to the standard value used by researchers, namely if the value of t-statistics > 1.96 then the hypothesis will be accepted and vice versa. If the result of the t-statistical value < 1.96 , then the decision taken is a hypothesis can be rejected or the hypothesis is irrelevant and if the value of direct influence is in the range of 0 to 1 then it is positive, and vice versa if the value is in the range of -1 to 0 then it is negative.

The table below shows the values of the results of direct relationships between exogenous and endogenous variables. The dividend policy on the stock price has an insignificant effect because it has a t value of $0.429 < 1.96$ and is negative because the direct effect value of -0.254 is in the range of -1 to 0. The profitability of the stock price with a value of t $0.348 < 1.96$ and a direct effect value of -0.175 in the range of -1 to 0 resulted in a negative and insignificant decision. Furthermore, profitability to the dividend policy does not have a significant and positive influence because it has a value of t $1.579 < 1.96$ and a direct effect value of 0.411 are in the range of 0 to 1. Solvency affects the stock price insignificantly with a value of t $0.874 < 1.96$ and is negative with a direct effect value of -0.360 in the range of -1 to 0. Then on hypothesis five insignificant solvency affects dividend policy with a value of t which is $1.083 < 1.96$ and is negative with a direct effect value of -0.312 in the range of -1 to 0.

Table 3. Direct Impact Results

Hypothesis	Variable	Direct Effect	Indirect Effect	Total Effect	t-statistic (> 1,96)	Note
	Eksogen	Endogen				
1	Dividend Policy	Stock price	-0,254	-	-0,254	0,429
2	Profitability	Stock price	-0,175	-	-0,175	0,348
3	Profitability	Dividend Policy	0,411	-	0,411	1,579
4	Solvency	Stock price	-0,360	-	-0,360	0,874
5	Solvency	Dividend Policy	-0,312	-	-0,312	1,083

3.4 Indirect Effect

An indirect effect test is useful to determine the role of dividend policy variables or DPR in mediating the influence of relationships between ROA, DER and stock price variables. Hypothesize 6 the effect of profitability on stock prices by dividend policy mediation has a value of $0.254 < 1.96$ this means that dividend policy is not successful in mediating the influence between profitability to the stock price or has an insignificant influence and indirect effect value of -0.104 is in the range of -1 to 0 is negative. While the effect of solvency on the stock price through dividend policy has an insignificant effect with a value of t of $0.379 < 1.96$ and has an indirect effect value of 0.079 in the range of 0 to 1 so it is positive.

Table 4. Indirect Impact Results

Hypothesis	Variable	Direct Effect	Indirect Effect	Total Effect	t-statistic (> 1,96)	Note
6	Profitability → Stock Price → Dividend Policy	-	-0,104	-0,104	0,254	Insignificant
7	Solvency → Stock Price → Dividend Policy	-	0,079	0,079	0,379	Insignificant

4. CONCLUSION

Based on the research conducted it was concluded that Profitability, solvency and DER in influencing the stock price are negative and are considered not to have undergone significant changes with a statistical value of 0.348 each; 0,874; 0,429; < of the t-statistical reference value of 1.96 sets and has a negative direct effect value that is in the range of -1 to 0 with each value of -0.175; -0,360; -0,254. Furthermore, Profitability has a positive effect but does not experience significance to the DER ratio with a t-statistical value of $1,579 < 1.96$ and a positive direct effect value of 0.411 in the range of 0 to 1. Solvency is not significant to the dividend policy because it has a t-statistical value of $1,083 < 1.96$ and is negative with a direct effect value of -0.312 in the range of -1 to 0. For dividend policy variables represented by the Dpr was unsuccessful in mediating the influence of profitability and solvency on the annual stick price because it did not meet the standard t-static values that exist 1.96 with t-statistical values of 0.254 and 0.379 respectively and have indirect effect values of -0.104 and 0.079, respectively.

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