

# The Influence of Debt Policy and Profitability on Investment Decisions: Dividend Policy as a Mediator

Lina Sari<sup>1,\*</sup> Erni Masdupi<sup>2</sup>

<sup>1,2</sup> Universitas Negeri Padang, Padang, Indonesia.

\*Corresponding author. Email: [linasarinasion10@gmail.com](mailto:linasarinasion10@gmail.com)

## ABSTRACT

This study aims to determine the effect of debt policy and profitability on investment decisions with dividend policy as a mediator in LQ45 companies listed on the IDX. The population in this study are all LQ45 companies listed on the Indonesia Stock Exchange for the period 2015 to 2019 using secondary data. Sampling is purposive sampling, with a total sample of 150 samples. The data analysis technique used SEM AMOS 23 analysis. The results showed that (1) The debt policy variable had a negative and significant effect on dividend policy. (2) Profitability variable positive and significant effect on dividend policy. (3) The debt policy variable has a negative and insignificant effect on investment decisions. (4) Profitability variable has a positive and significant effect on investment decisions. (5) The dividend policy variable has a positive and insignificant effect on investment decisions. (6) The dividend policy variable cannot mediate the relationship between debt policy and investment decisions. (7) Dividend policy variable can mediate the relationship between profitability and investment decisions.

**Keywords:** *Investment Decision, Debt Policy, Profitability, Dividend Policy.*

## 1. INTRODUCTION

Stock investment may reflect the company's growth in conducting economic and business activities. Investor stock investment decisions are an important factor in a company's financial function. Investor's stock investment decision concerns the expectation of the company's future profits. Stock investment decisions by investors are generally measured through a comparison of Price-to-Earning Ratio (PER), Price-to-Book Value (PBV) and Tobin's Q, namely between the company's stock price (price per share) and with profits obtained by the shareholders (earnings per share). Effectiveness in investors' stock investment decisions will be reflected in the achievement of optimal returns, and efficiency in stock investment financing will be reflected in obtaining funds with minimum costs [1].

There are several variables that can influence investment decisions, such as debt policy, profitability, and dividend policy. Debt policy is a determining factor in making stock investment decisions. Debt policy is proxied through the ratio of total debt (debts) to total equity/DER (Debt to Equity Ratio), total assets/DR (Debt Ratio), Short Term Debt to Total Assets (STDTA), Long Term Debt to Equity

Ratio (LTDER) ) owned by the company including investment in shares by investors. Management will be more careful in borrowing because a high amount of debt will cause financial difficulties within the company [2]. This is consistent with a study conducted by that debt policy has a positive impact on stock investment decisions in small companies in India [3].

Furthermore, profitability is obtained for the welfare of the management and company owners. An empirical study conducted by [4] profitability has a positive and significant impact on stock investment decisions. If the company chooses to distribute profits as dividends, it reduces retained earnings and further reduces the overall source of internal funding or financing. On the other hand, if a company chooses to hold on to maintain profits, its ability to build internal funding is even greater [5]. This is related to dividend policy decisions taken by the company's management. So far, researchers have not found any empirical studies which state that there is an influence of debt policy and profitability on investment decisions mediated by dividend policy. The observation period of this study with a span of five years of observation, namely 2015 to 2019 is expected to produce sufficient samples and can generalize. This study sets the object on the company LQ45 on the Indonesia Stock

Exchange. The reason the researcher chooses LQ45 company as the object of research is because LQ45 company is the company with the highest trading value in the regular market and the top company with the most capitalized in the last 12 months. The LQ45 company also has stocks that are resilient to the economic crisis. This is because most products are still needed and it is very unlikely that you will lose them.

## **2. LITERATURE REVIEW**

### ***2.1 The effect of debt policy on dividend policy***

The debt ratio has a significant negative effect on dividend payments in Nigerian and Kenyan companies [6]. They say that given the role of debt monitoring agencies, companies with high debt ratios can avoid paying high dividends. Debt is believed to play an important role in reducing agency costs resulting from conflicts between shareholder and management. In line with the above, [7] also found that debt policy variables do not have a significant impact on dividend policy. This happens because companies with high debt levels tend to minimize dividend payments to all shareholders, because most of the profits earned will be allocated to reserve funds for debt repayment so as to prevent bankruptcy.

### ***2.2 Effect of profitability on dividend policy***

The effect of profitability on dividend policy is in line with research by [6] Profitability is an important factor in dividend payment policies in Nigeria and Ghana. The results of this study show that there is a significant positive relationship between profitability and dividend payout ratios between companies in Nigeria and Ghana. This shows that the profitability of companies that declare and pay dividends is considered to be the main indicator of the company's capacity to pay dividends.

### ***2.3 The effect of debt policy on investment decisions***

According to [8] debt policy is a funding decision, management's decision to raise funds influences the company's research which is reflected in the stock price. Furthermore, [9] the addition of corporate bonds will allow outside parties to increase oversight of the company.

### ***2.4 The effect of profitability on investment decisions***

Profitability can reflect the benefits of financial investment, meaning that profitability has an effect on investment decisions because internal sources are getting bigger. The higher the profitability ratio, the more income that can be distributed to shareholders, the better [6]. A positive response from investors will increase the demand for shares [9]. Based on this, profitability has a very large influence for stock investors, so the company strives to maximize existing

resources to achieve the profit targeted by the company in order to maximize shareholder prosperity. [7].

### ***2.5 Effect of dividend policy on investment decisions***

According to [19], the amount of dividends to be paid directly affects the use of profits (earnings) from company activities to invest in shares. In this regard, the pecking order theory proposed by [16] reveals that companies prefer funding from internal sources because the costs are cheaper. Thus, a company that pays a fairly large dividend in a certain period will reduce the internal funds available for stock investment in the next period.

### ***2.6 The impact of debt policy on investment decisions mediated by dividend policy***

If management has incurred too much debt in financing the company's operations, problems can arise in meeting interest payments and debt repayment obligations in the future. Too high dependence on debt financing can make the company bankrupt. Using more debt to finance operations increases the risk to shareholders. So far there has been no research that emphasizes dividend policy mediating debt policy on investment decisions, but here the researcher wants to examine how the relationship between these variables is to get the important evidence.

### ***2.7 The impact of profitability on investment decisions mediated by dividend policy***

High net profit reflects earnings per share are high, which means that companies have a level of profitability that is good, the level of profitability can increase the confidence of investors to invest in shares in that company. So far there has been no research that emphasizes dividend policy mediating profitability on investment decisions, but here the researcher wants to examine how the relationship between these variables is to obtain significant evidence.

## **3. METHOD**

This study is a comparative causal study with the characteristics of the problem in the form of a causal relationships between two or more variables. Comparative causal research is ex post facto research, namely the type of research on data collected after the occurrence of a fact or event. The author can identify the fact or event as an affected variable (endogenous variable), namely investment decisions with dividend policy and conduct an investigation of the influencing variables (exogenous variables), namely debt policy and profitability in LQ45 companies listed on the IDX from 2015 to 2019. The research sample includes 30 companies listed on the LQ45 exchange.

**Table 1.** Measurement

Variable	Symbol	Measurement	Source
Investation	PER	Price per Share/ Earnings Per Share	[10]
decision	PBV	Market Price Per Share/ Book Value Per Share	[11]
	Tobin's Q	(Stock price x Total Shares Outstanding) + Total Debt/ Total Assets	[6]
Debt policy	DR	Total Debt/ Total Assets	[10]
	DER	Total Debt/ Total Equity	[6]
	STDTA	Total Short Term Debt/ Total Assets	[10]
	LTDER	Total Long Term Debt/ Total Equity	[10]
Profitability	ROA	Net Income/Total Assets	[10]
	ROE	Net Income/Total Equity	[10]
	NPM	Net Income/Net Sales	[11]
Dividend Policy	DPR	Dividend Per Share / Earning Per Share	[12]
	DPS	Dividends paid to common stockholders/ Common shares outstanding	[10]
	Yield	Annual Cash Dividends Per Share/ Market Price Per Share	[13]

**4. RESULTS**

To evaluate the validity of the structural model, it is done by assessing the fit of the model ( goodness of fit ). The structural model

that will be evaluated is no different from the full structural model that has been tested at the measurement model evaluation stage.

**Table 2.** Goodness of Fit Indices Model Structure

Criteria	Size Index	Results	Reference Value	Note.
Chi Square		130.279	As small as possible	
Probability		0.000	0.05	
CMIN/df		2.895	2 or 3	Good Fit
GFI		0.893	0.90	Marginal Fit
TLI		0.906	0.90	Good Fit
CFI		0.946	0.90	Good Fit
RMSEA		0.064	0.05-0.09	Good Fit

Based on the data processing performed by AMOS 23, the following are the results of hypothesis testing:

**Table 3.** Hypothesis Test

	Hypothesis	Estimate	SE	CR	P
Dividend_Policy	<--- Debt policy	-,25	,14	-1.70	,09**
Dividend_Policy	<--- Profitability	1.87	,44	4.20	,00
Investation decision	<--- Debt policy	-,03	,02	-1.37	,17
Investation decision	<--- Profitability	,45	,11	4.28	,00
Investation decision	<--- Dividend_Policy	.03	.03	1.36	,18

Notes: \*, \*\*Significant at the 0.01 Levels (two-tailed)

**Table 4.** Standardized Direct Effects

	Policy Debt	Profitability	dividend Policy	Decision Investment
Dividend_Policy	-,18	,43	,00	,00
Investation decision	-,10	,44	,14	,00

**Table 5.** Standardized Indirect Effects

	Policy Debt	Profitability	dividend Policy	Decision Investment
Dividend_Policy	,00	,00	,00	,00

	<b>Policy Debt</b>	<b>Profitability</b>	<b>dividend Policy</b>	<b>Decision Investment</b>
Investation decision	-,03	,06	,00	,00

**5. DISCUSSION**

This study aims to determine the impact of debt policy and profitability on investment decisions using dividend policy as an intermediary for LQ45 companies listed on the Indonesia Stock Exchange. For more details, the following is the effect of each exogenous variable on endogenous variables through mediating variables:

**5.1 Impact of Debt Policy on Dividend Policy**

Based on the results of the survey, debt policy as measured by using the Debt Ratio (DR), Debt to Equity Ratio (DER), Short Term Debt to Total Assets (STDTA) and Long Term Debt to Equity Ratio (LTDER) has a significant positif impact on dividends policy. It is measured using Dividend Payout Ratio (DPR), Dividend Per Share (DPS), and Dividend Yield.

This proves that a high level of corporate debt will minimize dividend payments to all company shareholders because most of the profits earned will be used to avoid the financial risk of paying off debt. The results of this study are in line with the results of previous research conducted by [11] which states that debt policy simultaneously affects dividend policy.

**5.2 Impact of Profitability on Dividend Policy**

Based on the results of the survey, profitability as measured by Return on Assets (ROA), Return On Equity (ROE) and Net Profit Margin (NPM) can have a positive and significant impact on dividend policy. This shows that investors consider the profits generated by the company to be an important factor in the dividend payment policy and the profits obtained are considered as the main indicator of the company's capacity to pay dividends policy that will be received by stock investors. The result of this study is the Dividend Signaling Hypothesis Theory proposed by [10]) which explains that dividend payments by companies are a signal for stock investors. So in this case, the company gives a signal that the financial condition or profits obtained are very strong so that they are able to distribute dividends to shareholders or investors. The results of this survey support the survey conducted by [6], which states that profitability has a significant positive impact on dividend policy.

**5.3 Impact of Debt Policy on Investment Decisions**

Based on the results of the survey, it shows liability policies measured by Debt Ratio (DR), Debt

to Equity Ratio (DER), Short Term Debt to Total Assets (STDTA) and Long Term Debt to Equity Ratio (LTDER) has a negative and insignificant impact on investment decisions. It is measured using Price to Earning Ratio (PER), Price to Book Value (PBV) and Tobin's Q.

Debt policy as measured using DR, DER, STDTA and LTDER in this study do not influence investment decisions. The amount of use of debt does not affect the stock price of an investment decision, as every company must have debt and investors do not consider the level of the company's debt when choosing a company's stock. This is as shown in Unilever Indonesia Tbk. which has high DR, DER, STDTA and LTDER values and has a high average investment decision as well.

The results of the investigation are inconsistent with the signaling theory proposed by [10]. In this theory, debt is a positive sign or signal in making an investment decision and by assuming debt, the company has a future outlook. Stock investors are expected to pay attention to this signal. The higher the debt of a company, the more investors will invest in the company.

The results of this study do not support the results of previous studies by [3] that debt policy has a positive impact on investment decisions.

**5.4 The Impact of Profitability on Investment Decisions**

Based on the results of the survey, profitability as measured by using Return on Assets (ROA), Return On Equity (ROE) and Net Profit Margin (NPM) have a positive and significant impact on investment decisions as measured by using Price to Earning Ratio (PER), Price to Book Value (PBV) and Tobin's Q. This shows that investors are always concerned with companies that have a high percentage rate of increase in profits for long-term investments in expecting stock prices that have high profits as well. In this case, stock investors prefer the company to use these profits as dividends and distribute them to shareholders, investors will perceive a positive response to investment decision making.

The results of this study are in line with the results of previous studies conducted by [4]; [14] and [15] which stated that profitability had a positive effect on investment decisions.

**5.5 Effect of Dividend Policy on Investment Decisions**

Based on the results of statistical data analysis in this study, it was found that the fifth hypothesis Ha

was rejected. The results of this study show that dividend policies measured by Dividend Payout Ratio (DPR), Dividend Per Share (DPS), and Dividend Yield have a positive and insignificant impact on investment decisions measured by Price to Earning Ratio (PER), Price to Book Value (PBV) and Tobin's Q. This means that high dividend payments will make stock investment decisions increase. However, this does not have a significant effect. It is considered that if the DPR increases, the retained earnings will decrease. Retained earnings are reduced, the availability of internal funds will also decrease. Thus the level of investment in the next period will have an effect. So it can be said that dividend policy affects investment decisions, although not as a whole. However, this is not the case in the Indonesian capital market, dividends are not a determinant of company investment decision.

The results of this study do not support the Pecking Order Theory proposed by [16]. This explain that the size of the dividend paid has a direct impact on the use of profits (income) from corporate activities for investment. Companies prefer funding from internal sources because the costs are cheaper. This is contrary to the statement that companies that make large dividend payments in a certain period will reduce the internal funds available for investment in the next period.

The results of this study are inconsistent with previous studies by [17] and [18] that dividend policies have a positive impact on investment decisions.

### ***5.6 The Influence of Debt Policy on Investment Decisions is mediated by Dividend Policy***

For the Debt Policy, the value of Standardized Direct Effects is -0.10 and the value of Standardized Indirect Effects is -0.03. This means that the value of standardized direct effects is smaller than standardized indirect effects, so it can be said that the dividend policy variable is not a mediating variable for the relationship between debt policy variables and investment decisions.

Based on the findings of the study, it shows that dividend policy as measured by using the Dividend Payout Ratio (DPR), Dividend Per Share (DPS), and Dividend Yield cannot communicate the relationship between debt policy as measured using the Debt Ratio (DR), Debt to Equity Ratio (DER), Short Term Debt to Total Assets (STDTA) and Long Term Debt to Equity Ratio (LTDER) investment decisions measured using the Price to Earning Ratio (PER), Price to Book Value (PBV) and Tobin's Q. The results show that company debt can affect dividends, but dividends do not affect investment decisions.

The results of this study are inconsistent with the study in [6] which states that debt ratio have a negative and significant impact on dividend payments, and is also not supported by previous research conducted by [19] which states that the amount of dividends paid will affect the use of earnings to make investments.

### ***5.7 The Impact of Profitability on Investment Decisions mediated by Dividend Policy***

Based on the findings of the study, it shows that dividend policies measured at DPR, DPS, and Dividend Yield cannot communicate the relationship between profitability as measured at ROA, ROE and NPM to the investment decision measured at PER, PBV and Tobin's Q. This does not affect the investor's interest in equity investment decisions, as it indicates that the profits generated by the company are used for other purposes rather than being used to pay dividends. The results of this study are inconsistent with Gordon and Linter's proper dividend theory. It states that there is an impact between profitability with dividend policy and investment decisions, as investors prefer to receive dividends from the company to increase the company's wealth make an investment decisions.

The results of this survey are also not in line with research conducted by [6] which states that profitability is an important factor in dividend payments and a survey of research conducted by [19] which states that dividend policies are significant positive impact on investment decisions.

## **6. CONCLUSION**

This is shown by the results of the study:

- (1) The debt policy variable has a positif and significant impact on dividend policy.
- (2) Profitability variable has a positive and significant impact on dividend policy.
- (3) The debt policy variable has a negative and insignificant impact on investment decisions.
- (4) Profitability variable has a positive and significant impact on investment decisions.
- (5) The dividend policy variable has a positive and insignificant impact on investment decisions.
- (6) The dividend policy variable cannot communicate the relationship between debt policy and investment decisions.
- (7) The dividend policy variable can communicate the relationship between profitability and investment decisions.

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