# The Effect of Capital Structure and Profitability on Firm Value with Dividend Policy as Intervening Variable

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Abstract: One of the supporting factors for economic growth of the country is the role of manufacturing sector. The manufacturing sector grows quiet fastly and it cannot be separated from the factors that influence the firm value, which is including capital structure, profitability and dividend policy. This study aims to analyze the effect of capital structure and profitability on firm value with dividend policy as an intervening variable in manufacturing companies that listed on the Indonesia Stock Exchange (IDX). The research method that used in this study is path analysis to analyze some research variables with direct and indirect effect. Population of this study are all manufacturing companies that listed on the Indonesia Stock Exchange (IDX) for the period of 2013 - 2017 which have the needed variables in the study, with the sample of 20 companies that selected using purposive sampling method. The research hypothesis was tested by Partial Least Square (PLS) analysis technique which processed using the SmartPLS 3 program. The results of the study show that there is an effect of profitability on firm value and the effect of profitability on dividend policy. The results also show that there is no effect of capital structure on firm value, capital structure on firm value through dividend policy as an intervening variable, and there is no effect of profitability on firm value with dividend policy as intervening variable.

Index Terms: Capital Structure, Profitability, Dividend Policy, Firm Value

## I. INTRODUCTION

Economic growth in a country is an indicator of economic success of a country. High economic growth usually indicates that the welfare of the country is also high. Global economic growth is considered can provide opportunities for developing countries to improve their economic, one of them is Indonesia, Indonesia's economic growth rate has increased quitely fast in recent years, because there is government's role to reducing Indonesia's dependence on commodity exports. This can be seen from Indonesia's Gross Domestic Product (GDP) Growth (Statistics Indonesia, 2019a).

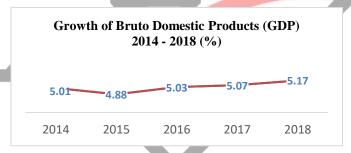


Figure 1 GDP Growth in 2014-2018

One of supporting factors for economic growth of a country is the role of the country's manufacturing sector, Indonesia is no exception. The manufacturing sector of Indonesia is developing quite fastly, the growth of large and medium manufacturing industries' production in 2018 rose 4.07% compared to 2017 (Central Statistics Agency, 2019b). This is also supported by data of annual sectoral index stock price movements from 2014 to 2017 was obtained that the average total stock price index of basic and chemical industries, miscellaneous industries, and the consumer goods industries which are classified in the manufacturing sector have higher stock index than other sectors.

No	Sector	2014	2015	2016	2017	Mean
1	Agri	1.535	1.719	1.864	1.558	1.669
2	Mining	1.950	811	1.384	1.897	1.510
3	Basic-Ind	810	408	538	808	641
4	Misc-Ind	1.230	1.057	1.371	1.207	1.216
5	Consumer	2.439	2.065	2.324	2.472	2.325
6	Property	473	491	517	468	488
7	Infrastructure	1.041	981	1.056	1.009	1.022

Table 1 Sectoral Stock Price Index of 2014 - 2017

8	Finance	1.059	687	812	1.066	906
9	Trade	903	850	861	904	879

Source: www.idx.co.id (data processed 2019)

The manufacturing sector is a sector that give promising things for investors. Many investors are interested to invest in manufacturing companies because the manufacturing sector is considered to provide a large return. This can be seen from the number of manufacturing companies that listed on the Indonesia Stock Exchange (BEI) has increased each year.

The companies at this time always try to increase the value of their respective companies (firm value). Increasing the firm value is one of the major considerations for potential investors to investing in their company. Agency theory states that the effort to increase the firm value, there will be many individuals or groups who have different desires and necessity in managing the company. Many factors that can affect the company's efforts to increase the firm value are, based on capital structure theory such as traditional approach theory is capital structure can change to optimal firm value, MM theory with taxes is debt can be a tax deduction, in addition to the theory of policy dividends such as bird in the hand theory is many investors like high dividend distribution policies and signaling theories is dividend policy can be a signal from management to prospective investors of the company. Factors of capital structure, profitability and dividend policy each have a tendency to increase or decrease the firm value.

Many companies prefer to use external capital rather than internal capital as a source of corporate funds on the grounds because of low interest rates will give more benefit to the company. A company must be able to use and manage existing sources of funds properly because the impact will also affect the company itself. The use of funding sources will certainly add to the obligations that must be paid by the company, but a high external capital structure also can be a positive thing because the company still has big trust from investors and it is considered to have good prospects in the future.

One of measurement for company performance in generating profits is the company's profitability. If the company gets high profits, investors will be happy and will attract the attention of other potential investors, this will certainly have an impact on increasing the firm value itself.

The main goal of the company for the short term is to gain profits and one of the long-term goals is to prosper the welfare of shareholders. In line with this, the goal of investors in investing also gets a large return, both in get of dividends or/and capital gains, so that the firm value is also influenced by the dividend policy that adopted by the company. The company's ability to pay dividends can be a positive signal in maximizing the firm value, especially for investors who don't like the risk.

Capital structure, profitability, dividend policy, and firm value variables are the focus of this study because there are gaps or differences in previous studies. Hoque, Hossain & Hossain's (2014) research examines the effect of capital structure on firm value, while Jacob & Taslim's research (2017) examines the effect of company liquidity, activity and profitability on firm value by using dividend policy as intervening variable, so this study uses capital structure and profitability as an independent variable, firm value as the dependent variable, and using dividend policy as intervening variable. Different research results are also found in the study of Chandra et.al (2017), it shows that dividend policy is not a mediator variable between capital structure and profitability towards the intrinsic firm value, while Mardasari's research (2014) shows that dividends mediate the effect of capital structure on firm value, and Jacob & Taslim's research (2017) shows that dividends mediate the effect of profitability on firm value. The focus of this research is to find and analyze "The Effect of Capital Structure and Profitability on Firm Value with Dividend Policy as an Intervening Variable" with the object of research is the manufacturing sector which is listed on the Indonesia Stock Exchange for the period 2013 - 2017.

## II. LITERATURE REVIEW

#### Firm Value

Firm Value is the selling value of a company as a operate business (Sartono, 2010). According to Tahu & Susilo (2017), the firm value is very important because the increase of firm value will be followed by increase of welfare of shareholders, where all companies have that goal.

## **Dividend Policy**

The company's dividend policy relates to something that have set by the company to determine the amount of profit to be paid to shareholders, but the final decision is on the directors, if the dividend decision has been announced, then it becomes a debt that must be paid and accounted for by the company (Priya & Mohanasundari, 2016).

According to Gumanti (2013), there are some theories regarding dividends, these theories are:

- 1. Irrelevant Dividend, this theory was first put forward by Miller & Modigliani (1961), it states that the firm value is not affected by the amount of the dividend paid.
- 2. The Bird in the Hand Theory, this theory was first developed by Lintner (1962). This theory explains that "one bird in the hand is more valuable than a thousand birds in the air", which can be interpreted that the cash was obtained directly is more valuable than profits in other forms.
- 3. Signal Theory (Signaling Theory), Easterbrook (1984) explains that the insiders of a company believe that if they issue the high dividends to shareholders, their company's stock prices will rise in the market.
- 4. The Tax Preference Theory, this theory was developed by Litzenberg and Ramaswamy, it states that the higher tax levied on dividends obtained rather than capital gains, and the possibility of delaying tax payments on capital gains, the effect will be negative on companies that distribute high dividends.
- 5. Agency Theory and Clientele Effect Theory, according to Barman (2008), there are agency relationship because there is limited management between the owner and the management. Gumanti (2013) states that in practice, investors also often get different

tax treatment regarding dividend income or capital gains, and they are charged with costs when they do securities transactions. So the company might attract the attention of other clients with the dividend policy that they have set.

## **Capital Structure**

Hoque, Hossain & Hossain (2014) suggested the allocation of operating cash flows between shareholders and debt holders is determined by the company's choice related to its capital structure. Financial experts believe that increasing a debt in the capital structure of a company can increase the firm value itself, but on the other hand increasing the proportion of debt in the capital structure can also increase the cost of the company's capital and reduce its market value.

There are some theoretical approaches related to capital structure (Hanafi, 2014: 297):

- 1. The traditional approach, argues that capital structure has an influence on firm value, so the company can obtain optimal firm value by changing the proportion of its capital structure.
- 2. Modigliani and Miller (MM) Approach
  - a. MM Theory without Tax, argues that capital structure does not affect firm value. In a condition without tax, the level of profit and business risk (investment decisions) will affect the firm value while the capital structure does not affect the firm value.
  - b. MM theory with taxes, MM believes capital structure can affect the firm value by calculating taxes, the higher the use of debt, the less taxes paid and the company can save cash outflows so as to increase the firm value.
- 3. Trade-Off Theory, Trade-off theory explains that the value of companies that use debt will increase with increasing debt and will begin to decrease at a certain level, whereas the tax savings from additional debt equals to the costs of financial distress of the company (financial distress).
- 4. MM Model with Corporate and Personal Taxes, Miller developed a capital structure model by including personal taxes, if the debt holders get interest and shareholders get dividends then they have to pay taxes on it.
- 5. Pecking Order Theory, Donald Donaldson (in Hanafi, 2014) made observations on the behavior of corporate capital structures in the United States (US) and it showed that companies with high profit levels tended to use lower debt.
- 6. Information Asymmetry and Signaling Theory, information asymmetry and signaling related to the parties of the company who do not have the same information each other, especially related to the prospects and risks of the company.
- 7. Agency Approach (Agency Approach), according to this approach, capital structure is considered as something that can reduce agency conflict, for example between management and shareholders.

#### **Profitability**

Chandra et.al (2017) explains that profitability is the ability of a company to generate profits in such a way as and use its assets effectively, so that the profitability becomes one of the important indicators to assessing company performance.

#### Framework

Financial decisions of a company's management have great affect to the firm value itself. Managers of a company are required to be able to optimize funding, investment and dividend decisions, so that managers can produce the right formulation in order to maximize the firm value with the aim of increasing the welfare of shareholders. Companies in maximizing value on the stock market is depended on many factors. Some of them are profitability, capital structure and company dividend policy.

Conceptually, this study was conducted to examine whether there is influence between profitability and capital structure on firm value with dividend policy as an intervening variable. The research model in accordance with the variables tested in this study is illustrated in the following model.

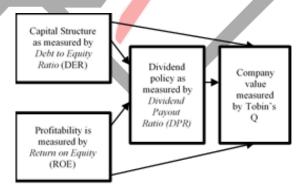


Figure 2 Research Model

# **Research Hypothesis**

## **Effect of Capital Structure on Dividend Policy**

Agency theory put forward by Jensen & Meckling (1976), capital structure has a positive relationship with dividend policy, where the benefits of capital structure as a source of external funding for companies, especially when interest rates are down, it becomes something that can reduce the use of shares, so it can minimize agency costs and give benefit to the company. The use of high debt can have an effect on increasing the level of dividends distributed, when debt that borrowed take low interest, the company gets more net income left to be distributed to shareholders, in the form of dividends.

Research conducted by Chandra et.al (2017) states that the capital structure that measured using DER has a positive effect on the DPR, where the company's decision to use debt in its capital structure as an effort to control managers' decisions from unfavorable investment funding. The positive effect of capital structure on dividend policy also shows that managers are becoming

more focused in their efforts to improve company performance by generating profits in order to pay interest and distributing dividends to shareholders. The results of Palupi, Sudjana and ZA (2017) research also revealed the same thing that the capital structure that measured using DER has an effect on dividend policy with negative effect, it explains that basically companies that use larger debt will be better because of reducing taxes, but this happens if the debt with high interest is also balanced with high profitability, but if not, the dividends that must be paid by the company to shareholders will decrease.

H1: Capital structure has a positive effect on dividend policy

#### Effect of Profitability on Dividend Policy

The influence of management in distributing dividends depends on the company's profitability or the company's performance in generating profits. The higher level of profitability of the company is obtained, it will also increase the dividend distributed because it is a signal that shows the success of the company.

H2: Profitability has a positive effect on dividend policy

## **Effect of Capital Structure on Firm Value**

The capital structure basically will have a direct influence on the company's financial position, if the company can optimize the used of capital structure, this will be more profitable for the company. Companies with high capital structure will maximize the firm value if the debt is close to 100% because investors can have the opportunity to expand and develop with their capital. H3: Capital structure has a positive effect on firm value

#### **Effect of Profitability on Firm Value**

Profitability is an indicator of a company's performance in generating profits so that it is often used as a reference as a valuation of the company for some potential investors. The higher the profitability of the company, the prospects of the company in the future are considered give more benefits and attracting the investors t to invest.

H4: Profitability has a positive effect on firm value

## Effect of Dividend Policy on Firm Value

As an investor or prospective investor, of course, many individuals prefer low risk, so they expect to receive benefits in the form of dividends because the results can be felt immediately. The higher level of dividends distributed, the more investors invest their shares in the company and this can increase the firm value.

H5: Dividend policy has a positive effect on firm value

# Effect of Capital Structure on Firm Value through Dividend Policy

A high capital structure with relatively low interest rates can increase the distribution of company's dividends, increasing dividends will help increase the firm value, especially for investors who prefer low risk.

H6: Capital structure has a positive effect on firm value through dividend policy as an intervening variable

## Effect of Profitability on Firm Value through Dividend Policy

Many investors depend on the performance of the company in choosing a company to invest, especially profitability of the company, high profitability gives investors hope to get the expected dividends, with the level of dividends that given, it is also the consideration of investors to invest in the company, so that the firm value will increased.

H7: Profitability has a positive effect on firm value through dividend policy as an intervening variable

### III. RESEARCH METHOD

This type of research is causality research and the data that used in this study are secondary data taken from the Indonesia Stock Exchange focusing on the manufacturing sector in Indonesia.

The population has been taken in this study were companies in the manufacturing sector which were listed on the Indonesia Stock Exchange in 2013 - 2017 with research samples that taken using the purposive sampling technique, which is manufacturing sector companies listed on the Indonesia Stock Exchange in 2013 - 2017 that has the necessary variables and includes to the sampling criteria in this study, are:

- 1. Manufacturing companies that listed on the Indonesia Stock Exchange for the period of 2013 2017
- 2. The company was not delisted by the IDX or did not leave the manufacturing sector during the period of 2013 2017
- 3. The company pays cash dividends for each observation period of 2013 2017
- 4. The company has profits every observation period of 2013 2017

Table 2 Research Sample

No.	Company Name	Company Code
1	Astra International Tbk.	ASII
2	Astra Otoparts Tbk.	AUTO
3	Sepatu Bata Tbk.	BATA
4	Charoen Pokphand Indonesia Tbk.	CPIN
5	Ekadharma International Tbk.	EKAD
6	Gudang Garam Tbk.	GGRM

No.	Company Name	<b>Company Code</b>
7	H.M. Sampoerna Tbk.	HMSP
8	Indofood CBP Sukses Makmur Tbk.	ICBP
9	Indofood Sukses Makmur Tbk.	INDF
10	Indah Kiat Pulp & Paper Tbk.	INKP
11	Indocement Tunggal Prakarsa Tbk.	INTP
12	Kalbe Farma Tbk.	KLBF
13	Multi Bintang Indonesia Tbk.	MLBI
14	Semen Baturaja (Persero) Tbk.	SMBR
15	Selamat Sempurna Tbk.	SMSM
16	Sri Rejeki Isman Tbk.	SRIL
17	Pabrik Kertas Tjiwi Kimia Tbk	TKIM
18	Surya Toto Indonesia Tbk.	ТОТО
19	Trisula International Tbk.	TRIS
20	Unilever Indonesia Tbk.	UNVR

Data analysis method that used in this research is Partial Least Square (PLS), which is an analytical method that eliminates the assumptions of Ordinary Least Square (OLS) regression, such as data distribution that must be normal multivariate, and there is no multicollinearity between independent variables (Wold in Ghozali & Latan, 2014). The analysis technique that used is path analysis which is an expansion of multiple regression used to determine the effect of independent variables on the dependent variable directly or indirectly (mediated by other variables).

Analysis using PLS is carried out in three stages are outer model analysis, inner model, and hypothesis testing. Tests conducted on the outer model are Convergent Validity, Discriminant Validity and Reliability. Evaluation of the inner model can be seen from several indicators which include the coefficient of determination ( $R^2$ ), predictive relevance ( $Q^2$ ) and Goodness of Fit (GoF).  $R^2$  value can be obtained using SmartPLS 3 software, while  $Q^2$  and GoF value are obtained manually using the following formula.

$$Q^2 = 1 - (1 - R1^2) (1 - R2^2)$$
  
 $GoF = \sqrt{\overline{AVE} \times \overline{R^2}}$ 

with:

 $R1^2$  = value  $R^2$  of variable Y1

 $R2^2$  = value  $R^2$  of variable Y2

 $\overline{AVE}$  = the average AVE value of all variables

 $\overline{R^2}$  = the average  $R^2$  value of variable Y1 and Y2

Hypothesis testing can be done by looking at P-values or it can be with T-statistics values. This study uses 95% confidence level (alpha 0.05), then if the P-values < 0.05 means the hypothesis is accepted, whereas if the P-values > 0.05 then the hypothesis is rejected.

## **Dependent Variable**

The dependent variable or endogenous variable is a variable that is determined by exogenous variables or other endogenous variables (Setiawan & Ritonga, 2011). The dependent variable in this study is firm value.

The firm value in this study was measured using the Tobin's Q method which is calculated by comparing the market firm value's shares with the book firm value's equity (source: Tahu & Susilo, 2017):

$$Q = \frac{Total\ Market\ Firm\ value}{Total\ Value\ of\ Company\ Assets}$$

# **Independent Variable**

The independent variable or exogenous variable is the variable that precedes the dependent variable and has responsibility for variations that occur in the dependent or endogenous variable (Setiawan & Ritonga, 2011). The independent variables in this study are capital structure and profitability. The independent variable for H5 is Dividend Policy, but the Dividend Policy variable for H6 and H7 becomes an intervening variable on the Capital Structure and Profitability of Firm Value.

The capital structure in this study is calculated by the leverage ratio is the Debt to Equity Ratio (DER). DER is a comparison between total debt and total equity of shareholders (source: Chandra *et.al*, 2017).

$$DER = \frac{Total\ Debt}{Total\ Equity}$$

Profitability in this study was calculated using the formula Return on Equity (ROE) (source: Hanafi, 2014).

$$ROE = \frac{Net profit}{Capital stock}$$

## **Intervening Variable**

Intervening variable is a variable between the independent variable and the dependent variable in the study (Setiawan & Ritonga, 2011). The intervening variable in this study is Dividend Policy.

The intervening variable that used in this study is the Dividend Policy measured using *Dividend Payout Ratio* (DPR) (source: Hanafi, 2014).

$$DPR = \frac{Dividends per Share}{Net Income per Share}$$

#### IV. RESEARCH RESULTS AND DISCUSSION

#### **Outer Model**

Convergent validity is used to validate indicators against their variables. According to Ghozali & Latan (2014), an indicator meets convergent validity if the loading factor is > 0.70.

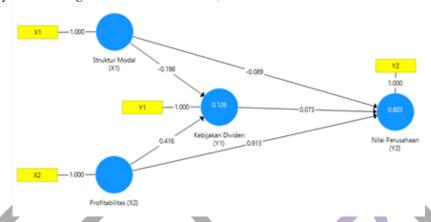


Figure 3 Outer Preliminary Research Model

# **Outer Preliminary Research Model**

The loading factor values X1, X2, Y1 and Y2 each have 1,000 which means the loading factor value > 0.70 so that it can be continued in the next process. PLS output resuls shows the calculation of Average Variance Extracted (AVE) of each variable > 0.50 so it meets the requirement of convergent validity where one latent variable is able to explain more than half the variants of the indicator in the average.

Table 3 Value of Composite Reliability and Cronbach's Alpha

Variable	Composite Reliability	Cronbach's Alpha
Capital Structure	1,000	1,000
Profitability	1,000	1,000
Dividend Policy	1,000	1,000
Firm Value	1,000	1,000

Then the reliability test was performed using composite reliability and Cronbach's alpha. The required composite reliability and cronbach's alpha values > 0.70. The composite reliability and cronbach's alpha values of all constructs are already above 0.70 so it can be concluded that there is no undimensionality problem in the model and it is said to be reliable.

#### **Inner Model**

Inner model testing has been done to find out which hypotheses can be accepted or rejected. This test is done by looking at  $R^2$ ,  $Q^2$ , and GoF.

Table 4 Value of R<sup>2</sup> and R<sup>2</sup> Adjusted

Variable	$\mathbb{R}^2$	R <sup>2</sup> adjusted
Dividend Policy (Y1)	0,126	0,108
Firm Value (Y2)	0,803	0,797

The R-square value for the dividend policy variable is 0.126 or shows that the dividend policy variable can be explained by 12.6% by the variance of the capital structure and the profitability of the company. It means showing the capital structure and profitability are weak in explaining dividend policy. R-square value for the firm value variable is 0.803 or shows that the firm value variable can be explained by 80.3% by the variance of capital structure, profitability and dividend policy.

 $Q^2$  value can be used formula:

 $Q^2 = 1 - (1 - R1^2) (1 - R2^2)$ 

 $Q^2 = 1 - (1 - 0.126) (1 - 0.803)$ 

 $O^2 = 0.827822$ 

 $Q^2$  value > 0 indicates that the model has predictive relevance, it means that the observed values have been reconstructed well. GoF calculation as follows:

 $GoF = \sqrt{\overline{AVE} \times \overline{R^2}}$ 

 $GoF = \sqrt{1,000 \times 0,4645}$ 

 $GoF = \sqrt{0.4645} = 0.68 \text{ (large)}$ 

Based on the GoF results was obtained, according to Ghozali & Latan (2014) the value is 0.68 indicating that the suitability of the model that has been built, it is included in a large category which means that each variable has a large predictive value to other variables.

## **Hypothesis Test**

Table 5 Hypothesis Testing Output Results

	Original Sample	Sample Mean	Standar Deviation	T-Statistics
	(O)	(M)	(STDEV)	( O/STDEV )
$X1 \rightarrow X2$	-0,918	-0,208	0,117	1,696
$X2 \rightarrow Y1$	0,416	0,460	0,180	2,316
$X1 \rightarrow Y2$	-0,089	-0,091	0,059	1,503
$X2 \rightarrow Y2$	0,913	0,904	0,048	19,023
$Y1 \rightarrow Y2$	0,073	0,085	0,047	1,565
$X1 \rightarrow Y1 \rightarrow Y2$	-0,015	-0,018	0,017	0,837
$X2 \rightarrow Y2 \rightarrow Y2$	0,030	0,042	0,035	0,8714

## **Effect of Capital Structure on Dividend Policy**

The test results show the path coefficients are indicated by the effect of capital structure on dividend policy directly at -0.198 with P-value of 0.091. Coefficient value of -0.198 indicates that the direction of influence caused by capital structure on dividend policy is negative and P-value > 0.05 indicates that the hypothesis at H1 is rejected, it means the capital structure has no significant effect on dividend policy. Capital structure that has no direct effect on dividend policy is supported by research by Mardasari (2014). This indicates that the funds owned by the company are prioritized to pay off debt and loan interest rather than to being distributed as dividends to shareholders. The company's decision to pay company obligations rather than pay dividends causes the capital structure has no effect on dividend policy.

## **Effect of Profitability on Dividend Policy**

The test results show the path coefficients or path coefficients shown by the effect of profitability on dividend policy of 0.416 with P-value of 0.021. It shows that the effect of profitability on dividend policy is directly at 41.6% and the hypothesis on H2 is accepted, it means profitability has a significant effect on dividend policy with the positive effect. The results obtained are in line with research conducted by Wijaya & Sedana (2015) and Li & Lie (2006) that the higher the profits obtained by a company, the more dividends will be distributed by the company. The results of this study are also supported by signaling theory which shows that companies tend to distribute dividends as a signal of the company's success in making profits, especially for investors who like profits in the form of dividends.

## **Effect of Capital Structure on Firm Value**

The test results show the path coefficients or path coefficients shown by the effect of capital structure on the firm value directly -0.089 with a p-value of 0.133. This value indicates that the effect caused by the capital structure on firm value is negative and the hypothesis on H3 is rejected, it means the capital structure has no significant effect on firm value. The results of this study are in line with research conducted by Suranto, Nangoi & Walandouw (2017) and Setiadharma & Machali research (2017). The results of this study support the capital structure theory of MM without tax, that capital structure does not affect the firm value, investors ignore the amount of tax from corporate debt so that companies that have debt or do not have debt do not affect the investor to invest to the company.

# **Effect of Profitability on Firm Value**

The test results show the path coefficients or path coefficients which are indicated by the effect of profitability on firm value directly at 0.913 with P-value of 0,000. This value shows the effect of profitability on firm value directly at 41.6% and the hypothesis at H4 is accepted, it means profitability has a significant effect on firm value with the positive effect. The results of this study are

supported by research conducted by Wijaya & Sedana (2015), Ilhamsyah & Soekotjo (2017), which also states that profitability has a significant positive effect on firm value. The higher the profitability of a company then the more effective the management of the company's fund sources and raises the interest of investors to invest, so that the firm value will be better.

#### **Effect of Dividend Policy on Firm Value**

The test results show the path coefficients or path coefficients shown by the effect of capital structure on the firm value directly at 0.073 with P-value of 0.118. This value indicates that the direction of influence caused by dividend policy on firm value is positive at 7.3% but the hypothesis on H5 is rejected, it means the dividend policy has no significant effect on firm value. This is supported by Gharaibeh & Qader research (2017) and Mardasari (2014) that dividend policy is not a determining factor that influences firm value. The results of this study are consistent with the theory of irrelevance in dividends put forward by Modigliani. Dividend policy that does not affect the firm value because the investors consider the current income from dividends is not too profitable and it is considered smaller when compared to future capital gains.

## Effect of Capital Structure on Firm Value through Dividend Policy

Estimation results on the indirect effect model of capital structure (X1) on firm value (Y2) through dividend policy (Y1) show an increase to -0.015 but still not significant with P-value of 0.403 or P > 0.05. This shows that the presence of a dividend policy variable (Y1) as an intervening variable changes the effect of capital structure (X1) on the firm value (Y2) for the better but it still insignificant, it means there is no effect of the capital structure on the firm value through dividend policy significantly.

The same research results were also found in the study of Chandra et.al (2017) which showed that dividend policy is not a variable that is able to mediate the effect of capital structure on firm value. The results of testing for this hypothesis can be seen from the results of previous hypothesis test where the capital structure does not affect to the firm value directly, capital structure does not affect dividend policy directly, and dividend policy does not affect the firm value directly, but the indirect effect is higher than the direct effect and significance of alpha is also more than 0.05, it can be concluded that dividend policy is not able to mediate the effect of capital structure on firm value, although the presence of dividend policy variables as intervening makes better the effect of capital structure on firm value rather than its direct effect.

A high capital structure can be profitable, but it can also harm the company, if the interest that was generated from debt is high, then the proportion of capital structure should be lower and must be balanced with corporate earnings income, some investors look at this carefully. Most investors are also not affected by the dividends obtained at the company and just focus on company performance, so the increase or decrease in dividend policy does not affect the firm value and there are other factors or things are seen by investors.

## Effect of Profitability on Firm Value through Dividend Policy

Estimation results on the indirect effect model of capital structure (X1) on firm value (Y2) through dividend policy (Y1) show a decrease to 0.030 and not significant with P-value of 0.384 or P > 0.05. This shows that with the dividend policy variable (Y1) as an intervening variable, changing the effect of profitability (X1) on the firm value (Y2) becomes less good so the coefficient becomes 0.030 and insignificant, it means there is no effect of profitability on the firm value through policy dividends significantly.

The results of this study are supported by Chandra et.al (2017) research that dividends are not a variable that is able to mediate the effect of profitability on firm value. The results of testing this hypothesis can also be seen from the previous hypothesis test where profitability has a significant positive effect on firm value, profitability has a significant positive effect on dividend policy, but also shows no significant effect on dividend policy on firm value, and the direct effect is lower than the effect indirectly with a significance of alpha > 0.05, it can be concluded that the dividend policy is not able to mediate the effect of profitability on firm value.

High profitability can affect dividends distributed by companies, cash flow that remain from profitability can be considered by management to be distributed to shareholders as dividends, so that high profitability can directly affect the increase in dividends, but increasing dividends do not necessarily make a significant change to the firm value, this is because investors may prefer the distribution in the form of shares rather than dividends, so that the benefits can be hold in the long term rather than dividends. This also causes investors to pay less attention to dividends as a matter of consideration in investing, so that in this study dividend policy is not able to mediate the effect of company profitability on firm value.

## **Theoretical Implications**

Based on the results of the research that have been obtained, this study provides theoretical implications that high profitability has a positive effect on firm value and dividend policy in the company, because many investors make profitability as an important reference for company performance, this is also explained in the pecking order theory where companies have abundant sources of funds if the profitability obtained is high. The results in this study also show that capital structure does not affect the firm value and also dividend policy. This supports the MM theory without tax where in the condition without regard to taxes, the level of profit and business risk can affect to the firm value, while the capital structure is considered does not have effect on the firm value. The trade-off theory also supports this research because companies that use debt will further increase the firm value, but it will decrease at some level.

In addition, this study also supports the theory of dividend irrelevance proposed by Modigliani and Miller that the firm value is not influenced by how much dividend is paid, this is because investors prefer returns in the form of retained earnings than dividends in the present, so they prefer retained earnings because they believe that the company's prospects are good and can provide more profits in the future than in the present. Investors consider the firm value may depend on the revenue generated by the company's assets and do not care about returns from the acquisition of capital or dividend policy, so the dividend policy is also not able to mediate the effect of capital structure on firm value and the influence of profitability on the firm value.

## **Managerial Implications**

This study also provides managerial implications that companies need to concern to the company's profitability to increase the firm value so it will attract investors to invest their assets in the company. In addition, companies and prospective investors should not consider capital structure as a burden on the company, but if the company can optimize its capital structure well, it can actually benefit the company. The company also needs to manage its dividend policy well because with various types of investors, there are those who prefer the small risk and prefer dividends rather than retained earnings, and vice versa. This research shows that if the dividend policy does not affect the firm value and it is not even able to mediate the effect of capital structure and profitability on the firm value, this is because investors think that retained earnings are better than dividends distributed because the prospects of the company may be good in the future for them, so they prefer the benefits they will get in the future over the profits in the present, that's also why they don't pay too much attention to the level of dividends that given by a company.

#### V. CONCLUSION AND RECOMMENDATION

#### Conclusion

- 1. Capital structure (X1) that measured by Debt to Equity Ratio (DER) has no significant effect directly on dividend policy (Y1) that measured by Dividend Payout Ratio (DPR).
- 2. Profitability (X2) that measured by Return on Equity (ROE) has a significant effect directly on dividend policy (Y1) that measured by Dividend Payout Ratio (DPR) with positive effect, it means that the higher the profitability of the company then the dividend policy of the company will also be higher.
- 3. The capital structure (X1) that measured by Debt to Equity Ratio (DER) has no significant effect directly on the firm value (Y2) that measured by Tobin's Q.
- 4. Profitability (X2) that measured by Return on Equity (ROE) has a significant effect directly on firm value (Y2) that measured by Tobin's Q with positive effect, it means the higher the company's profitability then the firm value will also be higher.
- 5. Dividend Policy (Y1) that measured by Dividend Payout Ratio (DPR) does not have a significant effect directly on firm value (Y2) that measured by Tobin's Q.
- 6. The capital structure (X1) that measured by Debt to Equity Ratio (DER) has no significant effect on firm value (Y2) that measured by Tobin's Q through dividend policy (Y1). It means that dividend policy (Y1) is not able to mediate the effect of capital structure (X1) on firm value (Y2).
- 7. Profitability (X2) that measured by Return on Equity (ROE) has no significant effect on firm value (Y2) that measured by Tobin's Q through dividend policy (Y1). It means that the dividend policy (Y1) is not able to mediate the effect of profitability (X2) on firm value (Y2).

## Recommendation

1. For companies

The optimal capital structure, high profitability, and good dividend policy in a company can change the company to be better. Companies should try to optimize the capital structure and try to allocate dividends that suitable with their respective types of investors, because some investors believe that capital structure and dividends as a signal of the company's prospects in the future.

2. For investors.

Investors and potential investors should be able to concern to capital structure, profitability, dividend policy and other factors that can affect to the firm value.

3. For future research.

For future research are hoped to use the same topics that related to firm value, capital structure, profitability, dividend policy and can complement and perfect this research.

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