Determinant factors affecting the value of manufacturing companies in Indonesia

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Abstract

This study aims to examine the effect of investment decisions, funding decisions, and dividend policies on firm value of Indonesian manufacturing companies listed on the Indonesia Stock Exchange from 2014 to 2018. The research sample consisted of 23 companies with 115 observations conducted during the period. Manufacturers, which process raw materials into semi-finished or finished goods, are identical with factories that use machinery, equipment, engineering techniques, and labour (Heizer & Render, 2015). The study found that partially the effect of investments with the proxy investment opportunity set (IOS) on firm value was positive and significant. It demonstrates the ability of a company to obtain and manage capital that ultimately has a positive impact on firm value. This study found that the effect of funding decisions on firm value was negative and significant. While the effect of dividend policy on firm value was proved to be positive but not significant. The study selected firm size as the control variable that had a positive but insignificant effect on firm value.

Keywords: Investment opportunity set (MVBVE); leverage; firm size; firm value
INTRODUCTION

The Indonesia Stock Exchange (IDX) is a capital market that serves as one of the alternative sources of funds for companies. The development of the stock exchange can be seen from the number of companies listed on the exchange and changes in the price of stocks traded. Changes in stock prices can provide clues about how bearish and bullish the capital market activities are and they also show investors’ interest in buying and selling stocks for high returns as well as for future investments (Brigham & Houston, 2011). High profit aims to maximize the welfare of shareholders. Rasyid (Rasyid et al., 2018) argued that there are three decision factors in finance, namely investment, funding, and dividends. This is often translated as an effort to maximize firm value, which is very important for investors before making any decision on investments. Every increase in operational performance and financial performance of the company will generally have an impact on stock prices on the stock exchange, which in turn will raise the overall value of the company. Various policies are adopted by management in an effort to improve firm value for the sake of the prosperity of owners and shareholders (Brigham & Houston, 2011). According to Miller & Modigliani (1961), firm value is based on the present value of the company with profits being generated from the assets owned today and some of tangible assets have a higher rate of return (Nenu et al., 2018). Thus, the better the financial performance shown by a company, the higher its stock price will be and the returns are assumed to be in accordance with investors’ expectation. Efforts to maximize firm value involve some parties, such as management and lenders. An agency relationship occurs if owners (an individual or some persons) employ another person or organization, for example the manager, to carry out the work and provide him or her with authority to make decisions. Improved financial performance is the most important consideration for investors. A company’s firm value reflects the result of its performance in one period as presented in its financial statements. The better the financial performance, the better the value of a company is. The firm value of a company will be stronger and the return rate will be higher. If the return is high, shareholders will prosper (Sualekhhattak & Hussain, 2017).

Industry growth can be seen in how much investment is allocated to the company. Investment decisions are those in the form of fixed assets and long-term assets. Investments must look at opportunities and examine them well. This is called an investment project. A finance manager is projected to study the investment project carefully and must be able to calculate and determine the amount of capital needed for investments and the IOS must be those of the promising one. It is an investment option used either individually or by companies. For companies, investment opportunities will affect the opinion of agents (managers), owners, investors, and creditors about firm value (Handriani & Robiyanto, 2018). The funding policy is considered by investors when making investment decisions. Investors see highly indebted companies as a problem as this condition has a negative effect on the return rate and can pose serious risks for them. This depends on the company’s capital structure. There is a tradeoff decision on return and risk with the increasing amount of financial obligation in the form of debt, fluctuating market price in a certain period or the scale of changes in total cash can improve the final results. Therefore, it is important to keep debt and equity balanced for an optimal capital structure (Wibowo & Rahim, 2019). A healthy capital structure is one that can balance risk and return to maximize stock market prices. The main reason to use debt to finance corporate activities is that in tax calculation, interest can be reduced, in other words, this can slash costs (Doan, 2019). A high level of debt will cut the profits earned by the company. Consequently, it will also have an impact on the level of dividends distributed (Asif et al., 2011). Dividend policy is also a problem for management. This is because the company expects sustainable growth by retaining earnings that are used by management to further improve the welfare of shareholder. Thus, it needs policies that improve the welfare of investors while not hampering management to increase firm value. The investment objective is not only limited to obtaining capital gains. It is also related to the distribution of dividends. Investors will be interested in investing in the companies that regularly pay dividends and more investors will raise firm value (Handriani & Robiyanto, 2018).
This study aims to provide investors with an illustration of investment in companies by taking into account firm value. This study used a sample of 23 Indonesian manufacturing companies. The firm value of Indonesian manufacturers fluctuated in 2014-2018 with an average of >1, indicating that the growth of the manufacturing companies was still high and this trend is projected to continue to prevail in the future. High firm value confirms the company’s sound performance both in managing businesses and achieving robust growth. A low firm value indicates that the company experiences low or/and slow growth with an unsatisfying performance. A good firm value can inevitably raise shareholder confidence in the company. This research was conducted to find out the effect of decisions of investment, funding, and dividend policy on the Indonesian manufacturing firm value.

**Literature review**

Firm value is a key issue for investors to decide where to invest their capital. They will see stock price as an indicator of how good a company runs its businesses. If the stock price rises, the firm value will also be high. Corporate managers need to improve company performance to raise market confidence, not just financial matters (Sheikh & Wang, 2013). A firm value results from company performance indicated by efforts to maximize shareholder wealth through higher stock prices (Brigham & Houston, 2011). There are several concepts in firm value. The first one is nominal value (NV). This is a formal value written in the articles of association, the balance sheet, and the collective share certificate. The next is market value (MV), which is used interchangeably with the open market value. This is the value generated from the bargaining process, which can be set if the company's shares are offered on the stock market. The third one is intrinsic value (IV). This is the most abstract concept as it involves the rough calculation of real firm value. Firm value in the intrinsic value concept is not just the value of assets, but also the value of the firm as a business entity with the capability of creating profits from now on. The fourth one is book value (BV). In this term, the firm value is measured based on accounting standards. It is simply quantified by referring to the variance of total assets and debt with shares outstanding. The fifth one is the liquidation value that refers to the total physical assets, which is always lower than the fair market value. The liquidation value is measured in the same way as finding out book value based on the performance balance prepared before the liquidation of a company (Geromichalos & Herrenbrueck, 2016).

This study analyzed firm value using the Tobin’s q theory as it takes into account not only the company’s market price but also the company's debt and capital stock, including common shares and equity. In brief, this refers to all of the company's assets. In this case, taking into account all assets, the company is not only focused on investors or shareholders but also creditors as all sources of funding for the company's operations consist of equity and loans provided by creditors (Sowa & Wilczyńska, 2016). A high firm value of the company will make investors interested in investing in the company. Investment affects the capital market, thereby stimulating the rise in stock prices.

Tadelilin defined investment as a commitment of several funding sources at the current time with the aim of obtaining future profits. Investment is related to the process of allocating funds to one or more assets with an emphasis on holding financial assets and securities (Tandelilin, 2012). This concept also applies to real assets without ignoring foreign financial assets. Thus, it can be concluded that investment deals with commitment, money and other resources carried out now in the hope of obtaining benefits in the future. On the purpose of investments, (Tandelilin, 2012) stated that specifically, there are several reasons why people make investments. First, they expect to have a better life in the future. Smart people will find all the ways to improve their standard of living and if this is not possible, at least attempting to prevent their current level of income from decreasing in the future. Second is to reduce the impact of inflation. By becoming an owner of a company or other business entities, an investor can keep the risk of diminishing value of his wealth or property at bay due to inflation. Third is to nurture tax saving-related motivation. Many countries have adopted policies to drive the investment to grow by offering tax facilities to people who are interested in investing in certain sectors.
Investment opportunity set is a future investment option that affects the growth of company assets and has a very important role for the company with a combination of assets in place and investment options in the future. This influences firm value (Paniagua et al., 2018). An investment opportunity set proxy has various forms and is classified into three main types. According to (Patra et al., 2012), they are the price-based IOS proxy, of which the company's growth prospects are partly stated in market value. This IOS proxy is based on the idea, in which the prospect of company's partial growth is incorporated in the market price and that growth will be greater than the relative market value to assets in place. IOS, which refers to the price, consist of ratios that reflects assets owned and market value of the company. These ratios include market value to book of assets, market to book value of equity, Tobin's q², earnings to price, and return on equity.

Second, the investment-based IOS proxy is an IOS that indicates a high level of investment activity that is positively related to the IOS value of a company. Companies having high IOS should also have a high level of investment in the form of assets that are placed or invested for a long time in a company. This proxy is in the form of a ratio that compares a measurement of investment that has been invested in the form of fixed assets or an operating result produced from the assets that have been invested. The investment-based IOS include the investment to net sales ratio, the capital expenditure to market value of assets ratio, and the capital expenditure to book value assets ratio. Finally, the variance-based IOS proxy that is based on the idea that an option will become more valuable if it uses variability in size to estimate the size of a growing option, such as the variability of returns that underlies an increase in assets. The ratios used for proxies that is based on this variance include the variance of returns and assets beta.

In an opportunistic view of management, investment and funding policy is the company's efforts to maximize its value. This can be identified from the company's policy towards expenditure and costs of funding. The funding decision is the one that is directly related to the source of funds, as well as policies in spending or financing for investments. A decision on funding is an important element for business activities to be optimal, including the way to obtain and manage investment funds effectively (Pasaribu et al., 2016). The capital structure theory explains whether there is an effect of capital structure on firm value if the investment and dividend decisions and policies do not change. In addition, if the company replaces some its equity with debt or vice versa it is interesting to see whether management's performance is still the same or not if the company sticks to the existing current financial decisions.

The modern capital structure theory was first adopted by Modigliani & Miller (1958), Modigliani-Miller (MM) stated that the debt ratio is irrelevant and there is no optimal capital structure. MM argued that how a company will finance its operations does not mean anything, therefore capital structure is not relevant here written back by Pradeep Rajopadhyay (Rajopadhyay, 2019). Gitman (2006) explained that capital structure is a pool of funds that the company can use and allocate (Agung, 2015). Those funds are taken from long-term debt and equity. The optimal capital structure is a combination of equity and debt which maximizes firm value. Capital structure is discussed in several theories. MM stated that firm value is not only influenced by capital structure. This opinion is based on the idea that companies can freely divide the capital structure between debt, preferred stock, and common stock. The statement is supported by the existence of an arbitration process, where the value of companies that use debt or not is ultimately the same. The arbitration process arises because investors prefer the same investment but generate greater profits or the smaller investments but produce the same profit. The second one is the trade-off theory. According to (Brigham & Houston, 2011), several problems prevent a company from using debt optimally. The most important thing is that the higher the debt, the stronger the probability of bankruptcy to prevail and the greater the interest to be paid. The possibility of failure to pay high interest will be even greater. Lenders can bankrupt a company if the company cannot repay debt. The next is the pecking order theory that assumes that the company aims to maximize shareholder welfare through internal funding. The company tries to issue the first securities from internal funds, retained earnings, then low risk debt and...
finally equity (Nugroho et al., 2017). The pecking order theory predicts the following sequence scenario: First, the company chooses internal funding. Internal funds are obtained from profits generated from company activities. Second, the company calculates the target payment ratio based on estimated investment opportunities. The company tries to avoid sudden changes in dividend payments. In other words, dividends should be paid constantly and in the case of changes, they are not significant. Third, a constant dividend policy, combined with unpredictable profit fluctuations and investment opportunities, will cause the cash flow received by the company to be greater than the investment expenditure at certain times and will be smaller at other times. If the cash flow is larger, the company will pay off debt or purchase securities, and vice versa. The company will use the cash flow it has or sell securities if the cash flow is not sufficient. Fourth, if external funding is needed, the company will issue the safest securities first. The ability of companies to manage funding will increase company profits. This affects the company’s ability to pay high amounts of dividends.

According to Miller & Modigliani (1961), dividends are the main objective for the company to go public, because shareholders want a return on investment. The benefits that will be reaped by shareholders are capital and dividends. The distribution of profits to investors also affects investor confidence in the company. There are two dividend theories: namely the dividend irrelevance theory advocated by Miller & Modigliani (1961) and the bird-in-the-hand theory (Purnamasari & Nugraha, 2020). They argued that the value of a company is only determined by its basic ability to generate profits and business risks. This means that the value of a company depends only on the revenue generated by its assets, not on how the income is separated between dividends and retained earnings. The second is the bird-in-the-hand theory that derived from the fifth assumption of the irrelevance of dividend policy theory that dividend policy does not affect the rate of return on investor equity. Gordon & Lintner (1959) argued that the minimum rate of return will increase if dividends are reduced, because investors are more confident with dividend distribution than capital gains generated from retained earnings (Raza et al., 2018). Gordon and Lintner said that investors actually expect to get dividends rather than capital gains. Large companies that are able to make profits and manage funding will raise the high dividends they share. Therefore, the bigger a company, the higher dividends to be distributed.

The size of the company is the value that indicates equity, sales, and assets. The size of the company in this study expressed by total assets. The greater the total assets of the company, the bigger the size of the company is. The greater the assets, the more capital to be invested. The size of the company can be seen from the total assets owned by the company (Setiadharma & Machali, 2017). It can be assessed from the total value of the company’s assets. The size of large companies show that they have recorded high growth. Companies with high growth will easily go into the capital market as investors see positive signals. High growth reflects an increase in firm value. The size of the company is also divided into three categories, namely large companies, medium companies, and small companies. The categorization of company size is based on total assets. Therefore, the size of the company is the size or total assets owned by the company.

METHODS

The population used in this study was companies listed on the Indonesia Stock Exchange. This research used purposive sampling. Based on the pre-determined criteria, 23 manufacturing companies were selected as the object of this research. They were AMFG, ARNA, ASGR, ASII, AUTO, BATA, CLPI, DVL, EKAD, FAST, GGRM, INDF, INTP, KLB, LION, LMSH, MDTL, SMSM, TBLA, TCI, TUR, UNTR, and UNVR. Research on the value of those companies used the Tobin’s q approach. Tobin’s q is used to measure firm value showing corporate executives’ performance in managing assets of the company (Kallapur & Trombley, 2001). The independent variable in this study was investment decision ratio with the market to book value of equity (MVBVE) as the indicator. Funding decisions were measured using the leverage (Lev) indicator in the debt-to-equity ratio (DER) proxy. Dividend policy was measured using the dividend payout ratio (DPR) indicator. While the
dividend payout ratio (DPR) measured the ratio of dividend per share and earnings per share. The size of the company was the value that shows the size of the company based on the value of equity, sales, and assets. The size of the company in this study was expressed by total assets. The greater the total assets of the company, the bigger the size of the company is (Setiadhharma & Machali, 2017).

**Multiple regression analysis**

This study used the multiple linear regression with the following equation:

\[ \text{Tobinsq} = \alpha + \beta_1 \text{MVBVE} + \beta_2 \text{DER} + \beta_3 \text{DPR} + \beta_4 \text{Size} + e \]

This descriptive statistical analysis provides an overview of observations, mean, median, maximum value, minimum value, and standard deviation. The following is the descriptive statistical data in this study.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Obs</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>TobinsQ</td>
<td>115</td>
<td>1,609206</td>
<td>0,7233518</td>
<td>0,5187562</td>
<td>3,437979</td>
</tr>
<tr>
<td>MVBVE</td>
<td>115</td>
<td>2,788274</td>
<td>1,538041</td>
<td>0,6256217</td>
<td>8,510543</td>
</tr>
<tr>
<td>DER</td>
<td>115</td>
<td>0,7202609</td>
<td>0,5823779</td>
<td>0,15</td>
<td>2,68</td>
</tr>
<tr>
<td>DPR</td>
<td>115</td>
<td>0,4717297</td>
<td>0,5856645</td>
<td>0,0006565</td>
<td>4,938272</td>
</tr>
<tr>
<td>Log ASSET</td>
<td>115</td>
<td>12.66549</td>
<td>0,8679697</td>
<td>11,09211</td>
<td>14,53746</td>
</tr>
</tbody>
</table>

Note: Tobin’s q is the firm value, MVBTE is an investment proxy that is the ratio between MV/BTE; DER is a proxy for funding that is the debt-to-equity ratio. The dividend payout ratio is a proxy for dividend policy, namely Dividends/Net Income and Lg Assets is the logarithm of total assets.

Table 1 above shows a population of manufacturing companies listed on the Indonesia Stock Exchange in the 2014-2018 period with 115 observations. The firm value variable as a dependent variable had an average of 1.609206. The standard deviation of firm value was 0.7233518. The minimum firm value of 0.5187562 belonged to PT. Lionmesh Prima Tbk. in 2018, while the maximum firm value of 3.437979 was recorded by PT. Selamat Sempurna Tbk. in 2015. Furthermore, the investment variable as an independent variable with an average value of 2.788274 with a standard deviation of 1.538041. The investment variable with a minimum value of 0.6256217 was booked by PT. Lionmesh Prima Tbk. in 2018, following the weakening of the metal and steel industry due to the massive imports of Chinese steel. PT. Unilever Indonesia Tbk. recorded the maximum value of 8.510543 in 2017. In average, the funding variable was 0.7202609 with a standard deviation of 0.5823779. The minimum value for this variable was 0.15 booked by PT. Indocement Tunggal Prakarsa Tbk. in 2016. The maximum value for funding belonged to PT. Tunas Baru Lampung Tbk. at 2.68 in 2016. Furthermore, the dividend variable had an average value of 0.4717297 with a standard deviation of 0.5856645. Regarding of this variable, the minimum value went to PT. United Tractors Tbk. at 0.0006565 in 2017. PT. Lionmesh Prima Tbk. was in the first position for the maximum value for this variable of 4.938272 in 2015. The last one was the control variable of firm size with a value of 12.66549 in average and a standard deviation of 0.8679697 with the maximum value secured by PT Astra Internasional Tbk. at 14.53746 in 2018, while PT. Darya-Laboratoria Tbk. was with the minimum value at 11.09211 in 2014.

**Testing the regression panel model**

The next test was panel regression testing. This test aimed to find out which regression model was best to serve as a model to estimate research data. Table 1.2 depicts that the output of the chow test shows the value of Prob> F = 0.0000, which is less than 0.05. This means that H1 was accepted, that the fixed effect (FE) was better than the common effect (CE) or pooled least square (PLS), followed by the Hausman test with a Prob> chi2 value of 0.9442. The result of the random effect model was the best as the value of Prob> chi2 is higher than 0.05. The final phase was to perform a Lagrange multiplier (LMT) test, aiming to select between random effects (RE) and pooled least square (PLS) or common effect (CE) methods. From the table above, it can be seen that the value of Prob> chibar2 is 0.000, which is less than 0.05, thus the method chosen was the random effect (RE), compared to the pooled least square (PLS) or common effect (CE) method.
Table 2. Regression model test

<table>
<thead>
<tr>
<th>Model Selection Steps</th>
<th>Indicator Test</th>
<th>Description (Selected Model)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chow Test</td>
<td>Prob &gt; F = 0.0000</td>
<td>The Fixed Effect</td>
</tr>
<tr>
<td>Hausman Test</td>
<td>Prob &gt; 0.9442</td>
<td>The Random Effect</td>
</tr>
<tr>
<td>Langrange Multiplier Test</td>
<td>Prob &lt; 0.0000</td>
<td>The Random Effect</td>
</tr>
</tbody>
</table>

The next step was to test the classical assumptions. There were several independent variables in this study, namely investment (IOS), funding (DER), dividends (DPR), and the dependent variable of firm value using the random effect (RE) method, thus the classic assumption test used only the normality test and the multicollinearity test, whereas the heterokedasticity and autocorrelation tests were not needed because they had already used the generalized least squares (GLS) method. Later, the Kolmogorov Smirnov test was conducted for a normality test. The following is a table depicting the results of the Kolmogorov Smirnov test, which shows a combined K-S value of 0.234, which is higher than 0.05, indicating that the distribution of data is normal. Next, a multicollinearity test was performed to find out the relationship among the independent variables. To find out the presence or the absence of multicollinearity, the results of the tolerance value or value inflation factor (VIF) were analyzed. The study was claimed to be free of multicollinearity if the tolerance value was more than 0.1 and the value inflation factor (VIF) was less than 10.

Table 3 above indicates that the value of each variable was low with the VIF value of less than 10 and the 1/VIF value of higher than 0.1. Thus it can be said that the data in this study were free from multicollinearity among independent variables.

Table 3. Multicolinearity test

<table>
<thead>
<tr>
<th>Variable</th>
<th>VIF</th>
<th>1/VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Log Asset</td>
<td>6.39</td>
<td>0.156494</td>
</tr>
<tr>
<td>MVBVE</td>
<td>5.80</td>
<td>0.172481</td>
</tr>
<tr>
<td>DER</td>
<td>3.29</td>
<td>0.303821</td>
</tr>
<tr>
<td>DPR</td>
<td>1.69</td>
<td>0.590306</td>
</tr>
<tr>
<td>Mean VIF</td>
<td>4.29</td>
<td></td>
</tr>
</tbody>
</table>

RESULTS AND DISCUSSION

The panel data regression in this study used the best model, namely the random effect model. The following is a table that presents the results of the panel data regression test:

Table 4. Multiple linear regression analysis

<table>
<thead>
<tr>
<th>TobinsQ</th>
<th>Coef.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cons</td>
<td>0.0136234 (0.991)***</td>
</tr>
<tr>
<td>MVBVE</td>
<td>0.3751868 (0.0000)***</td>
</tr>
<tr>
<td>DER</td>
<td>-0.659052 (0.000)****</td>
</tr>
<tr>
<td>DPR</td>
<td>0.0310298 (0.443)</td>
</tr>
<tr>
<td>Log ASSET</td>
<td>0.0795267 (0.405)</td>
</tr>
<tr>
<td>R squared</td>
<td>0.7002</td>
</tr>
<tr>
<td>F (Prob)</td>
<td>0.0000</td>
</tr>
<tr>
<td>Observasi</td>
<td>115</td>
</tr>
</tbody>
</table>

Note: significance * =1%; ** =5%, *** =10%

The MVBVE ratio shows that the coefficient was positive, then it had a positive effect on firm value (Tobin's q), which means that when MVBVE had increased, the firm value rose. MVBVE had a positive and significant relationship with Tobin’s q as the significance value was smaller than α of 0.000 <0.05 and the coefficient value of 0.3751868. DER as a proxy of leverage shows the coefficient was marked negative on firm value of Tobin's q, which means that when DER had increased, firm value rose with a significant value of 0.000 <0.05, which means it had a negative and significant relationship with firm value with a coefficient value of -0.65905252. Furthermore, the dividend payout ratio shows a positive marked coefficient on firm value (Tobin's q), which means that when the
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Dividend payout ratio had increased, firm value rose with a significance value of 0.443 with a coefficient of 0.0310298, which means that dividends had a positive and insignificant relationship with firm value. It can be concluded that if the t-test (partial) was performed, the variable that had a relationship with firm value was MVBVE, which was positive and significant, while DER was negative and significant. Whereas the dividend payout ratio and firm size did not have a relationship with firm value, which was positive and not significant. The f-test (simultaneous) was conducted to find out the effect of independent variables on the dependent variable. The value of Prob>chi2 was 0.0000, which is smaller than 0.05. Then it can be concluded that the independent variables jointly influenced the dependent variable.

Regarding the effect of investment on firm value of manufacturing companies listed on the Indonesia Stock Exchange, it can be seen that the coefficient value on this variable was positive at 0.3751868 with a significance value of 0.000, which is lower than 0.05. It can be said that investment decisions in the research, which took into account the market to book value of equity (MVBVE), had a significant and positive effect on firm value. This means that if MVBVE had increased by 1%, it would drive firm value to rise by 0.3751868%. The test results indicate that companies with a high firm value would be considered good by investors as it can provide a good return through high stock prices. This is in accordance with the theory of Kallapur & Trombley (2001). The price-based IOS is a proxy, implying that the company's growth prospects are expressed in market prices. This IOS proxy provides an understanding that investment opportunities can be identified from the ability of the company to obtain and manage capital, which in turn affects firm value. This result is in line with research by Handriani & Robiyanto (2018), who found that investments proxied with IOS had a positive and significant effect on firm value. The desire to invest will increase if the industrial growth rises (Handriani & Robiyanto, 2018). As the sound industrial growth boosts up firm value, investments will be on the right track with maximum returns in sight. Giriati (2016) emphasized that IOS has a negative effect and is not significant to firm value. That is because the returns received by investors are not optimal because of the policy of the firm’s managers in maximizing profits that puts pressure on the company to pay dividends rather than investing (Giriati, 2016).

The results of statistical tests show that DER proxied funding had a negative and significant effect on firm value. The result of this study indicate that funding had a negative coefficient of -0.6559052 with a significance value of 0.000 <0.05. This means that if the DER rose by 1, it would drive firm value to drop by -0.6559052. The DER value was negative, causing firm value to decrease. When DER increases, firm value drops. A negative DER is caused by the high average value of DER, which fluctuates each year. A good ratio sees a balance between debt and equity. This result is in line with research by Dutta, Mukherjee, & Sen (2018), who found that DER has a negative and significant effect on firm value. A high DER can reduce firm value as it adds a lot of financial costs due to the company's high debt if compared to equity. In contrast to the research of (Babaei, Z., Shahveis, F., & Jamshidinavid, 2013) and (Sulong et al., 2013), if previous research findings are in line with the negative and significant effect, current research found that DER has a positive and significant effect on firm value. If DER is high, the company will obtain more funds from the external sources and increase the value of the company.

The results of the statistical tests show that dividends had a negative and insignificant effect on firm value. The results of this study indicate that the effect of dividends had a positive coefficient of 0.0310298 and a probability value of 0.443 > 0.05. This means that the effect of dividends in this study had a positive and insignificant effect on firm value. A regression coefficient of 0.0310298 and a significance value of 0.443 provide a positive but insignificant effect on firm value. The insignificant effect shows that the dividend payout ratio was not one of the main factors that significantly affected the company's value. In addition, the amount of the dividends distributed to shareholders was not related to the high or low value of the company and was not a consideration for investors to purchase stocks. This research supports the theory of Miller & Modigliani (1961), which stated that market prices and firm value are not influenced by dividend policy. According to MM, firm value is the...
company's ability to create profits, while dividing earnings into dividends and retained earnings does not affect firm value. Thus, this theory is consistent with the results of this study that dividend policy does not significantly influence firm value. This research is in line with a report entitled *Impact of Dividend Payout Ratio on the Value of Firm: A Study of Companies Listed on the Nigerian Stock Exchange* written by Odum, Odum, Omeziri & Egbanike (2019). The report states that dividend policy has a negative and insignificant effect on firm value. The results of this study contradict the research of Malik & Maqsood (Malik & Maqsood, 2015), which found that dividend policy has a significant positive effect on firm value.

The influence of firm size on firm value of the manufacturers listed on the IDX can be seen by with the coefficient value of this variable was positive at 0.0795267 with a significance value of 0.405, which is greater than 0.05. This means that firm size has a positive but insignificant effect on firm value. The size of the company that did not have a significant relationship would discourage investors to invest. A positive coefficient value means that the size of the company will increase firm value. Company size is seen from the total assets for its operational activities. The bigger the company, the bigger the fund needed by the company is. One source of funds is external parties. Therefore, the bigger the company, the more debt the company has. The amount of corporate debt has the potential to reduce company assets as the size of the company's assets is used as collateral. Thus, the imbalance of assets and debt can trigger concern for investors due to the high risks. This study is in line with the research conducted by Setiadhama & Machali (Setiadhama & Machali, 2017), which found that company size has a positive but insignificant effect on firm value. In contrast, the research of Iswajuni et al. (2018) found that company size has a positive and significant effect on firm value (Iswajuni et al., 2018). Thus, the larger the size of the company, the higher its value is.

**CONCLUSION**

This study aims to examine the effect of investment decisions, funding decisions, and dividend policy on firm value in manufacturing companies by using a sample of 23 companies in the 2014-2018 period. The results of this study found that the investment variable proxied the market to book value of equity (MVBVE) shows a positive and significant effect. Then, the first hypothesis states that investment decisions have a positive effect on firm value received. The effect of the funding variable proxied by debt equity ratio was negative and significant. This is because the company’s high DER would decrease firm value due to the extensive use of debt rather than equity. The second hypothesis states that the effect of funding decisions proxied by DER on firm value was positive and significant. Dividends did not affect firm value, meaning that the amount of dividends did not affect firm value. Then the third hypothesis states that dividend policy on firm value had a positive and significant effect on firm value was rejected. The company had no significant effect on firm value. This result is in line with research by Zavala & Salgado (2019) and Setiadhama & Machali (2017), which found that company size did not have a significant effect on firm value. In contrast to Lumapow & Tumiwa (2017) and Hydrinis (2019) research, firm size had a positive and significant effect on firm value.

Based on previous research, there are several implications that can be implemented. One of the basic things that investors should do before making a decision on investments is to pay attention to financial statements of the manufacturing companies. The first thing to note is related to firm value, such as debt, assets, market capitalization, and many other factors that reflect firm value. Company’s performance is reflected by those indicators. A high firm value confirms the good performance of the company in management and growth achievements. If firm value is low, it indicates that the company growth is insufficient or slow with the relatively poor performance. A high firm value will improve shareholder confidence in the company. The second consideration should be seen from the company’s investment. A well-performed company will manage the existing sources of funding and capital, thereby increasing returns. If this is achieved, the investors’ confidence in investing in the company will be high. This market confidence is reflected in the high market price of the company, thereby increasing the value of the company. In terms of funding, avoid companies with large debts while firm
value goes down. Regarding of dividends, select companies that distribute dividends regularly. Those routinely distribute dividends will see a strong firm value and better investor confidence.

This research focused on manufacturing companies. Future studies can expand the population and research samples, such as the Kompas100 index, the Sri Kehati index, and other sectoral indices on the Indonesia Stock Exchange. The research period can be extended for the sake of better results. Investment opportunity set has three types of proxies, namely price-based proxy, investment-based proxy, and variance-based proxy that can be used in further research. Further research can use growth, profitability, and others as the control variable.

REFERENCE


