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The Effect of Innovational Performance on Determining Firm Value: Evidence from Indonesia

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Abstract

This study explores the most significant determinant of capital structure towards the value of manufacturing companies in Indonesia. Multiple regression models were used as statistical tools to investigate the most significant determinants of the firm value of manufacturing companies in Indonesia for a sample of 300 manufacturing firms listed on the Indonesia Stock Exchange. The results showed that profitability, company size, dividend, investment, and innovational performance were positively related to firm value. Debt was negatively related to firm value and dividend was an insignificant firm value determinant. Meanwhile, the influence of innovational performance variables mediating the effect of investment on firm value showed that the role of mediation innovational performance was able to increase the influence of total investment on firm value. Furthermore, empirical findings will help company managers to make decisions about the attempts to increase the firm value.

Pengaruh Kinerja Inovasi terhadap Nilai Perusahaan: Studi Kasus di Indonesia

Abstrak

Studi ini bertujuan untuk menguji determinan yang paling signifikan dari struktur modal terhadap nilai perusahaan manufaktur di Indonesia. Model regresi digunakan sebagai alat statistik untuk menhuji determinan yang paling signifikan dari nilai perusahaan manufaktur perusahaan di Indonesia, menggunakan sampel 300 perusahaan manufaktur yang terdaftar di Bursa Saham Indonesia. Penelitian ini berhasil mengkonfirmasi bahwa profitabilitas, ukuran perusahaan, dividen, investasi, dan kinerja inovasi secara positif berpengaruh terhadap nilai perusahaan. Variable Hutang berpengaruh negatif terhadap nilai perusahaan sedangkan variabel dividen merupakan determinan yang berpengaruh tidak signifikan terhadap nilai perusahaan. Sementara itu, pengaruh variabel kinerja inovasi yang memediasi pengaruh investasi pada nilai perusahaan menunjukkan bahwa peranan mediasi variable kinerja inovasi mampu meningkatkan pengaruh total investasi terhadap nilai perusahaan. Selanjutnya, temuan empiris akan membantu manajer perusahaan untuk membuat keputusan tentang upaya untuk meningkatkan nilai perusahaan.

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INTRODUCTION

The vision of industrial development in Indonesia as stated in Presidential Regulation the Republic of Indonesia Number 28 of 2008 Concerning National Industrial Policy ("Presidential Regulation the Republic of Indonesia Number 28 of 2008 Concerning National Industrial Policy ", 2008) is that Indonesia becomes a Firm Industrial Country by 2025, with a vision between 2020 as a New Advanced Industrial Country. It seems that there is no doubt about how big the role of the manufacturing industry is for the country's economy, especially Indonesia. There are at least 3 benchmarks to describe the role of the sector. The first is to form Gross Domestic Product (GDP). Secondly, to employ labor and the third is to increase exports.

Data from the Indonesian Central Bureau of Statistics reveals that the manufacturing industry is a major contributor to the national GDP, beating the agricultural sector. In 2017, the processing industry had a role up to 20.16% of GDP. Referring to several types of business sectors, the processing industry was the only one that can contribute up to one fifth of GDP. The agricultural and trading sector contributed 13% to each other, whereas the concern was that the number of the role decreased according to the annual trend. In 2010, the manufacturing sector accounted for 22.04%, down to 21.76% in 2011. Within the next three years, it started from 21.45% then 21.03% and 21.08%. Starting from 2015 to 2017, the numbers dropped by 20.99%, 20.51% and 20.16% respectively.

Looking at its growth, the average manufacturing development is below the economic growth. That is why it is only natural that the national economic growth cannot move from 5%, and is followed by the power to employ the labor is still weak. In average, the manufacture grew to 4.82% in the period of 2011 to 2017. The average increase in GDP was 5.39%. Fortunately, the non-oil and gas industry was still growing at an average of 5.69% per year. The next attention went to the decline in the role of the manufacturing industry in GDP and its growth was below the economic growth, making it not conducive to employ more labors. As of August 2017, the industrial sector employed 17 million workers or 14.05% of the top 4 of the total number of employments after agricultural, trade and community services. If the manufacturing sector could grow faster, the employment of labors was believed to be able to employ more labors. The third concern was the role of the manufacturing industry in exports. If it was compared with the performance of other countries, for example India (55%), Malaysia (62%) Thailand and Vietnam (73%) then for Indonesia, it was only 40%. That is how big the role of the manufacturing industry in Indonesia and it is followed by the rapid discussion of the capital structure and its role in increasing corporate value.

Over the past four decades, it has been one of the most debated topics in the financial literature, since Modigliani and Miller (1958, 1963) introduced their capital structure propositions. Researchon the value of companies in Europe have been widely carried out such as research by (Yazdanfar & Öhman, 2014, 2015; Bertoni et al., 2015; Vomberg et al., 2015; Sardo & Serrasqueiro, 2017). Following the Modigliani and Miller (1958, 1963) theory on the study of capital structure and its influence on the corporate value, this issue raises a high interest for financial researchers. It is how companies apply ratios in their capital structure to achieve optimal firm value. Indonesia has introduced many market-oriented reforms in the financial sector since the mid-1980s and 1990s. The Indonesian Financial Services Authority stated that at present, the utilization of the Indonesian capital market as an alternative source of long-term financing had increased. Efforts to increase investor confidence can be done through improving the company's internal performance by achieving profitability, firm size, dividends, debt, investment, and innovational performance.

Profitability refers to the ability of a company to generate profit within a certain period and in using all of its capital. It is crucial as it is such an effort to maintain the company's long-term survival, because it can predict whether the company will have good prospects in the future or not. In addition, profitability also explains the ratio of mana-

gement effectiveness based on returns from sales and investments. A condition where there is a high profitability is interesting to be examined in relation to increasing the investor confidence in investing where the investment needs of the company will also be determined by the profitability level.

Firm size describes the size of assets owned by a company. It explains the company's ability to provide the number and variety of production capacity or services. The higher the stock market price. This will also simultaneously increase the firm value. Further, big companies usually have better control over market conditions which make them able to face economic competition and be less vulnerable to economic fluctuations. In addition, the big companies also have more resources to increase their firm value as they have better access to external information sources compared to small companies. The higher the profitability and firm size of the company, the higher the investors' expectation on the acquisition of high fixed dividends in the future.

Dividend is an inseparable part of the company's funding decisions. Dividend policy is such a decision whether profits obtained by the company at the end of the year will be distributed to shareholders in the form of dividends or to be retained to increase capital for investment financing in the future. The company's ability to pay dividends can reflect the firm value. If the dividend payment is high, then the share price will also be high. Thus, it will also affect the firm value to be high.

Further, debt is used to determine the extent of the company's funding capability for long-term debt owed by its own capital. The use of long-term debt is intended to increase profits which is done if the cost of debt is smaller than the cost of capital. The use of long-term debt increases the return on tax protection, so that the Earning Per Share (EPS) generated is higher.

Next, investment is interpreted as a commitment to the use of a number of funds or other resources made at the time, aiming to obtain a number of benefits in the future. Investment decisions aims to obtain a high level of return with a certain level of risk. High profit with manageable risks is expected to increase the firm value which also increase the prosperity of the shareholders. This needs to be done because performance refers to the company' achievement in its operational activities, either in terms of financial, marketing, fund raising and channeling, technological, as well as human resource aspects.

Meanwhile, innovational performance explains a process of the company's main resources involving research, creation of future technologies in the production process and innovations that must be developed from time to time to continue to support the corporate efficiency that requires public support. This emphasizes that managers must highly consider the resources and strategies before making investment decisions.

A high innovation, both in the process and product, will increase the company's ability to create quality products. A high product quality will increase the company's competitive advantage which will ultimately have an impact on the firm performance. Innovation is a technological, managerial and social process, where new ideas or concepts are first introduced to be put into practice in a certain culture. It is a determining factor in industrial competition and a formidable weapon against competition.

The previous study succeeded in demonstrating the state of the art that has been done by many studies to understand the relationship of capital structure with the firm value, such as research by (Johnson, 1960; Masulis, 1983; Myers & Majluf, 1984; Titular & Wessels, 1988; Gennotte & Leland, 1990; Aggarwal & Padhan, 2017; Bharwaj, 2018) . The theory of capital structure and value of the company has long attracted the interest of researchers in developed countries. The study of the company's capital structure has been concentrated in developed countries such as the United States, Britain, and Germany. From the existing literature, the researchers found that the research were carried out by (Modigliani & Miller, 1963; Jensen & Meckling, 1976; Masulis, 1983; Myers, 2001; Jaros & Bartosova, 2015; Vomberg et al., 2015).

The findings of all these studies have not led to consensus on which capital structure fac-

tor can influence the value of companies that apply to emerging economies such as Indonesia, thus we believe that our finding from this research will be main novelty. Therefore, the main objective of this research is to understand the most significant determinants of the capital structure to the value of Indonesian manufacturing companies listed on IDX.

Hypothesis Development

The Effect of Profitabilty on Firm Value

In decades, many theories have attempted to explain the determinants of a company's capital structure. These theories indicate that the company chooses a pattern of capital structure based on the selection of variations in funding sources for company activities. The modern theory of capital structure was initially started by Modigliani and Miller in 1958, which began to highlight the issue of the importance of increasing corporate value, and the efforts to reduce costs on its capital structure.

After the theory of capital struture, pecking order theory, trade-off theory, and agency theory emerged. The first theory was pecking-order theory (POT) by (Myers, 1976, 1984; Myers & Majluf, 1984). The postulate is based on the existence of asymmetrical information between the manager and the owner. POT implies the hierarchy of choosing the use of funding sources, which begins with the use of internal funds, issues shares, and the last option is to use debt. This effort is only as the last effort for external equity. It was supported by researchers such as (Shyam-Sunder & Myers, 1999; Chirinko & Singha, 2000; Serrasqueiro & Caetano, 2015).

The next is the trade-off theory (TOT), which states that companies choose the optimal capital structure by balancing the benefits of debt and tax. TOT is supported by several researchers such as (Campbell & Kelly, 1994; Junior & Fama, 2002; Serrasqueiro & Caetano, 2015). They showed a few empirical facts about TOT and POT and the fact that it was getting more interesting to do a research in this field. There are several facts that first, public companies that have large total assets use financing hierarchies by maximizing retained earnings. then if the retained earnings are insufficient then the next option is the debt option chosen for financing the company's operations and the final choice is utilizing corporate bonds. Second, public companies with small total assets use hierarchical financing by maximizing equity and if it is not enough, then the next option is debt as a source of financing.

The determination of funding sources is closely related to an information asymmetry between the owner and the agent which underlies the way of thinking of the agency theory. The agency theory implies that high leverage decreases agency costs and increases firm value by encouraging managers to act more in the interests of shareholders. Previous research which used agency theory include research by (Crutchley & Hansen, 1989; Jensen, 1994; Hammes & Shapiro, 2001; Bosse & Phillips, 2016).

Most of the empirical evidence on the capital structure comes from the studies of the determinants of company profitability such as those by (Ukaegbu, 2014; Yazdanfar & Öhman, 2014; Al-Maskati et al., 2015; Kodongo et al., 2015), debt determinant (Haron et al., 2013; Yazdanfar & Öhman, 2015; Campbell et al., 2016), also he studies of the determinants of equity financing are for example by (Vomberg et al., 2015; Campbell et al., 2016). These studies have found several company characteristics such as size, assets, profitability, investment, and leverage that are used as the most significant determinants of firm value. This present study discusses the literature relating to the determinants of firm value in relation to the capital structure theory in detail.

Profitability plays an important role in determining the value of the company. TOT (Trade-off Theory) predicts a negative relationship between the profitability and the firm value. The TOT study of the high profitability of the company will have an impact on the condition of the information asymmetry to reduce corporate funding from debt, so that the debt is not optimally utilized which results in the

impact on the value of the company that does not increase. On the other hand, the POT predicts a positive relationship between the profitability and the firm value. Companies that have high profitability cause more retained earnings, reducing dependence on external funding sources so that using the internal funding sources for various activities increases the value of the company. Several empirical studies have found a positive relationship between profitability and firm value (Shaheen, 2012; Zulfiqar & Din, 2015; Ernayani & Robiyanto, 2016; Handriani & Robiyanto, 2018a). The findings of these studies showed a positive and significant relationship between profitability and firm value with the support of pecking order theory. Similar studies in Indonesia also showed the same evidence as what was done by the Indonesian researchers such as (Mai, 2010; Handriani & Robiyanto, 2018b; Mulyono, 2018). Therefore, the first empirical proposition based on the POT is:

H1: Profitability is positively related to firm value

The Effect of Firm Size on Firm Value

Company size is the second determinant of the firm value. TOT shows a positive relationship between the company size and the firm value. Large companies have easy access to debt from external parties because they are more diversified, so the risk of bankruptcy is smaller. Some empirical studies conducted in Europe are by (Garicano et al., 2016; Peng et al., 2018). They found a positive relationship between the company size and the firm value. POT shows a positive relationship between the company size and the firm value. Myers and Majluf (1984) suggested that the information asymmetry is very small in a larger company, in terms of increasing firm value. Companies with a larger size will have greater profits, so that they are able to carry out any activity to increase the value of the company with a source of financing from the retained earnings they have. Similar studies have also been conducted in Indonesia (Nohong, 2016; Mulyati, 2017) who confirmed the same results. Therefore, the second empirical proposition based on the TOT theory is:

H2: Firm size is positively related to firm value

The Effect of Dividend on Firm Value

In deciding how much cash that will be distributed to the shareholders, managers must always remember that the company's goal is to maximize the shareholder's value. As a result, the ratio of the dividend payments expressed as a percentage of the net income to be paid in the form of dividends should consider the investor's preferences whether to choose dividends or capital gains.

Dividend payments show the transfer of wealth from the debtholders to the shareholders. The phenomenal research conducted by Jensen (1986) stated that managers and the shareholders always have different interests known as agency conflicts. Jensen stated that one of the problems between the managers and the shareholders is that the shareholders prefer dividend payments rather than being reinvested while the opposite is for the managers. POT states that companies prefer to use funds sourced from internal companies (Myers & Majluf, 1984). The use of funds from the internal companies does not have the burden to pay dividends at the end of the period. On the other hand, according to Myers and Majluf (1984) a decrease in the dividend payments would cause companies to have reserves of the internal funds for investment. Therefore, based on the POT, then: (1) the company will choose internal funding sources, because these funds will be obtained without causing negative signals that can reduce stock prices, (2) if an external funding source is needed, the company will first issue debt, while the issuance of the equity will be carried out as a final step. This is because the issuance of loans is less likely to be a bad signal by investors. This causes a rise in the value of the company. Empirical relationships that have been carried out in Europe confirmed that the dividend payments have a positive and significant effect. This was found in research (Skinner & Soltes, 2009; Isakov & Weisskopf, 2015; Crane et al., 2016)

Whereas for empirical studies in Indonesia, it has been carried out previous research (Taungke & Supramono, 2015; Gusni, 2017) which also confirmed the same results. Therefore, the third empirical proposition based on the TOT theory is:

H3: Dividend is positively related to firm value.

The Effect of Debt on Firm Value

Debt is an instrument that is very sensitive to changes in corporate value determined by the capital structure (Modigliani & Miller, 1958). The higher the proportion of debt, the higher stock price. However, at a certain point, the increase in debt will reduce the value of the company because the benefits obtained from the use of debt are less than the costs incurred. The managers must consider the benefits and costs of the sources of funds chosen in making funding decisions. Each funding source has different financial consequences and characteristics. The company owner prefers the company to create debt at a certain level to increase the value of the company. Large companies that diversify tend to take advantage of high debt capacity. Therefore, it can be estimated that large companies tend to issue bigger debt than small companies. The debt implementation with POT confirms that debt is based on a source of financial preferences in the order of funding that has the smallest risk (Myers & Majluf, 1984; Abdullah et al., 2017). POT prefers internal funding sources. If funds from the external sources are used, the suggested funding sequence is retained earnings, debt and the last is the issue of equity (Myers & Majluf, 1984). Results that are consistent with pecking order theory prove that debt ratios are inversely related to firm value (Al-Ani & Al-Amri, 2015; Plumlee et al., 2015; Yazdanfar & Öhman, 2015).

The values of a profitable company are more likely enable them to use internal funds and to borrow in small amounts (Myers, 1984; Saleh et al., 2005). The empirical relationship that has been carried out in Indonesia confirmed that debt has a negative influence on the value of the company. The studies were previously carried out by (Handriani et al., 2016; Memarista, 2016; Cheryta et al., 2018). Therefore, the fourth empirical proposition based on POT theory is:

H4: Debt is negatively related to firm value

The Effect of Investment on Firm Value

Handriani and Robiyanto (2018a) used the investment level as a proxy to examine the increase in firm value. Companies with high growth rates are likely to have the ability to fund their business internally so that companies are not too tempted to look for external sources. They are also expected to have a high corporate value. Investment decisions cannot be observed directly. The type of capital expenditure seems to have a large influence on the value of the company, because this type of information will bring the information about the expected revenue growth in the future. McConnell and Xu (2008) examined ideas in relation to the level of investment expenditure in research and development companies.

Investment that uses technology has become a strategic issue in the economic development. Several studies have also been conducted. Adeoti (2012) examined the relationship between investments in technology in export companies. Yildiz et al. (2013) argued that innovation and technological progress have been adopted by young entrepreneurs who aimed at the country's economic growth. Yildiz et al. (2013) also showed that at that moment, we were still at the learning stage to evaluate the benefits of technology investment. For the technology investments were evaluated according to the appropriate time, the process of evaluating infrastructure investments was far more difficult. The results of this empirical analysis showed that investment in investment projects implied high uncertainties that had the potential to have a negative effect if it was not managed properly.

Schumpeter (1912) argued that innovation led to the emergence of winners and losers in the market. In a competitive economy, inno-

vation is a crucial process that can increase the capital expenditure. It turned out that the increase in capital expenditure, which was relative to previous expectations, resulted in an increase in return on shares around the time of the announcement, and vice versa, whereas a negative return on the company made a decrease in capital expenditure. These findings have led to a result stating that the investment decisions performed contained the information showing signals about the company's prospects in the future. In the literature, the technological investment is discussed as an element of the recombination process to produce innovation. This point is an important part of this research. Empirical evidence regarding the relationship of corporate investment with firm value shows diversity.

A research conducted in Europe found a positive influence between investment and firm value. It was in line with research conducted by (Isidro & Sobral, 2015; Luo et al., 2015). The results were also consistent with the pecking order theory, proving that the level of investment was positively related to firm value. The empirical evidence had also been found in Indonesia which also confirmed that investment had a positive influence on the value of the company. These research were carried out by (Handriani, 2016; Handriani & Robiyanto, 2018a). Therefore, the fifth empirical propositions based on POT theory is:

H5: Investment is positively related to firm value.

The Effect of Innovation on Firm Value

Rapid technological changes and product variations influence the development of all industries. Many factors determine the business performance of an organization, one of which is innovation. Rapid technological advances and high levels of competition require continuous innovation, which in turn will improve the company performance. Innovation is an effort to introduce something new through technological, managerial, and social processes. The focus of innovation is the creation of new ideas, which in turn will be implemented into new products and new processes. The main purpose of the innovation process is to provide and link better customer values. Innovation can be viewed with a structuralist approach and a process approach. The structuralist approach views innovation as a unit with fixed parameters such as technology and management practices, while the process approach views innovation as a complex process, which often involves various social groups within the organization.

Innovation is more an aspect of organizational culture that reflects the level of openness to new ideas. On the other hand, innovational capability is the ability of an organization to adopt or implement new ideas, processes and new products (Hurley & Hult, 1998) which will lead to an increase in the value of the company. Empirical evidence regarding the relationship of innovational performance with the firm value shows diversity. Several previous research had been done and found a positive influence between the innovational performance and the firm value. It was also in line with research conducted by (Pick & Azari, 2011; Ramos & Acedo 2011). Therefore, the sixth and seventh empirical propositions based on the POT theory are:

H6: Innovational performance is positively related to firm value

H7: Innovational performance mediates the effect of investment on firm value

METHOD

Several requirements that must be met in the procedure of processing data using path analysis can be stated as follows, the relationships between variables are linear and additive, all residual variables do not correlate with each other, the relationship pattern between variables is recursive, namely that the causal relationship is unidirectional and the level of measurement of all variables, at least, are intervals.

Hair et al. (1998) stated that there are four steps that must be taken in order to use this path analysis, namely developing the model, which must be done based on the theory, developing path diagrams to show causality, con-

versing path diagrams into a series of structural equations and measurement model specifications, selecting the input matrices and estimation techniques for the model built. Next, there are 2 regression equations that should be used:

$$\text{Firm Value} = \beta_0 + \beta_1 Pro + \beta_2 Fz + \beta_3 Dv + \beta_4 Dt + \beta_5 Inv + \beta_6 Ip + \varepsilon 1$$

$$\text{Innovational Performance: } \beta_6 Inv + \varepsilon 1$$

The types of variable used in this research consisted of exogenous variables (Table 1): profitability, firm size, dividend, debt, investment. On the other hand, the endogenous variables consisted of innovational performance and firm value.

RESULT AND DISCUSSION

The main sample used in the Indonesia Stock Exchange was from 2011 to 2017. The population used should meet the criteria of a sample preferred by the researchers and they were carefully chosen to make them relevant to the study design. The sample firms had to meet these following requirements: The firms must be listed on the Indonesia Stock Exchange (IDX) in 2011-2017, they had a positive asset growth each year from 2011-2017, and had financial reports and data during the period of 2011 to 2017. The firms' financial report period should on December 31st each year. The data was available in the annual balance sheet of each company issued by annual reports by IDX. Descriptive statistics of the data is shown in Table 2.

The hypothesis was examined by using the path analysis covering the firm value, firm size, profitability, dividend, debt, innovational performance, and investment variables. The next step is to examine the hypothesis proposed. The hypothesis that can be seen

Table 1. Research Variables

Variable		Variable Measurement
Profitability	Pro	Profit after tax / total asset
Firm Size	Fz	Natural logarithm of total asset
Dividend	Dv	Dividend per share / earnings per share
Debt	Dt	Total debt / total asset
Innovational Performance	Ip	Capital expenditure to market value of assets
Invesment	Inv	Current assets to net sales.
Firm Value	Fv	(Market value of equity + total debt) / total assets

Table 2. Descriptive statistics

	N	Range	Minimum	Maximum	Mean	Std. Deviation
Pro	300	.40	.00	.40	.11	.09
Fz	300	8.21	10.32	18.54	14.20	1.52
Dv	300	79.01	.10	79.11	37.25	16.59
Dt	300	1	.00	1	.43	.26
Ip	300	60.95	38.19	99.14	75.41	14.86
Fv	300	.98	.00	.98	.46	.21
Inv	300	18	.00	.98	.58	1.96
Valid N (listwise)	300					

based on the magnitude of t-value is presented in Table 3.

Table 3. The Direct Effects of Profitability; Firm Size; Dividend; Debt; Innovational Performance; Invesment and Firm Value

Variables	Unstandard Estimate	Coefficient Standardized	t Value
Pro → FV	.17	.06	2.04*
Fz → FV	.04	.01	2.44**
Dv → FV	.10	.80	1.46*
Db →FV	.71	.38	-2.05*
Inv → FV	.30	.30	1.97*
Ip → FV	.36	2.01	3.39*

Description: *) significant on α = 5%
**) significant on α = 10%

This study also calculated the indirect effects of innovational performance which mediates the influence of investment on firm value which was not proven by using Sobel Test measurement as shown in Table 4.

a positive measure of the firm value. It was also in line with a research by Handriani and Irianti (2015) which concluded that companies that achieved a high ROA tended to dominate the market position in their industry, so they often had more competitive advantages in exploring investment opportunities, and more access to capital markets so that it was easier to obtain additional funds which could then increase the firm value in the investors' perspective.

Table 4. The Result of Innovational Performance Mediating the Influence of Investment on Firm Value

Variable	Statistical Test	P Value	Error Standard	Result	
Inv →Ip → FVP	.14	.0008	.3557	p value < .05	Accepted

CONCLUSION AND RECOMMENDATION

This study aims to examine the influence of the innovational performance application as a firm value determinant. The test results on the first hypothesis stating that profitability has a positive effect on firm value was supported empirically. This was indicated by the value of t at 2.04. Profitability is the main determinant forming the value of the company. The higher the level of profitability, the higher the value of the company was. It was in line with the results of the previous research (John & Muthusamy, 2010; Gusni, 2017) which proved that the greater the profitability of the company, the more distributed income to shareholders was, and thus the expected value of the company would be higher. The ROA showed the management efficiency of the company assets and was also

Therefore, profitability had significant positive implications for increasing the firm value. The implication for financial managers is that obtaining a high ROA is still an obligation for financial managers, because companies that have a high ROA have unlimited opportunities to invest, while company investments that promise a positive NPV in the future are ideal for investors at IDX. It was also in line with the POT showing that the selection of investment objectives on the financial asset in Indonesia were only applied in the companies which generated high profits. Therefore, it could be concluded that they had a good financial performance. In contrast, if the profits obtained by the company were relatively low, it could be said that the company

was less successful or had a poor performance. This was because the profitability was the result of a number of policies and decisions of the company's management.

Profitability could be considered as the company's ability to generate profitability from the activities carried out in the accounting period. Investors invested in the shares of the company aimed to get a return, which consisted of yield and capital gains. The higher the ability to obtain profitability, the greater the return expected by investors was. Therefore, it made the value of the company looked better. Usually, based on the observations, companies have high return because they have investment opportunities. If a manager had worked hard and managed to increase sales while the costs had not changed, then the profits must increase beyond the previous period, which implied a success. A high profitability showed good corporate prospects, so the investors would respond positively to these signals and the value of the company would increase. The results of this study suggest that managers should try to increase the sales volume to increase the profitability. The acquisition of high profitability gives an indication of good corporate prospects so that it can trigger investors to participate in increasing the value of the company. This study was in line with the results of the study (Pandey, 2004).

The second hypothesis test proposes that company size has a positive influence on the firm value. The results of this study indicated that this hypothesis had empirical supports, because the value of t is 2.44. The implication is that organizations should have the measures that affect the profitability. The implication underlying this assumption is that in publicly owned companies, managers and employees will strive to increase the growth of the company by making profitable investments. Large companies with better access to the capital market will easily obtain funding sources for their investments, so that it will increase the investors' confidence that has the potential to increase the firm value. This research was in line with the results of research conducted (Pervan & Višić, 2012; Yildiz et al., 2013; Srivastava & Laplume, 2014).

The managerial implication is that the financial managers must take strategic steps to increase the size of the company by adding assets, both capital assets and real assets. Therefore, the efforts to increase profits can be done by maximizing the use of assets owned by the company. The utilization of these assets is done by diversification and investments that are able to foster the superiority of a product, so that the advantages it has are able to increase their sales and profitability. Investors in Indonesia are very fond of the companies that have sales and profitability growth as the indicators of good corporate performance.

The third hypothesis test stating that the dividend is positively related to the firm value did not get any empirical support as the value of t is at 1.46. This study produced a positive and insignificant relationship between pay-out dividends and the firm value. This could be related to the fact that IDX registered manufacturing companies used dividends as a source to eliminate possible conflicts between bondholders and shareholders with an increase in the equity ratio. The dividends paid were an important factor for shareholders. Not all companies in the manufacturing sector used dividends as a medium to signal the company's prosperity to shareholders. The results of this study suggest that the financial managers in registered companies should not distribute dividends because they do not attract prospective investors. It is better to improve their performance by determining investment projects that have a positive NPV and investment that will bring consequences to the rate of return proportionally.

The fourth hypothesis test proposing that debt is negatively related to firm value got an empirical support as the t-value was at -2.05. This could be related to the fact that the Peking Order Theory assumes that the agency costs of the debt use increase along with the increasing investment. The proportion of the use of own capital is used first and after that, the company can use new sources of external funds. Therefore, to obtain an optimal ratio of debt to own capital, it can be done by balancing agency debt

costs with debt benefits. As long as the benefits of using debt are still large, the debt will automatically be added. However, if the agency costs which use debt is greater than the benefits of using debt, the debt is no longer considered good to add. It was also in accordance with the previous research by (Kodongo et al., 2015; Yazdanfar & Öhman, 2015).

The logical consequence of this research was in line with the pecking order theory which states that in general, companies in Indonesia prefer the priority of internal funding sources to invest and this could increase the public trust, making the value of the company to increase. The results of this study suggest that companies must determine profitable investments. This can be achieved by considering various conditions in choosing an investment offered. Only investment in profitable projects that can generate a positive net present value. The funding needs are prioritized on the internal sources such as retained earnings. Besides, to further strengthen the contribution of the profitability in achieving an increase in firm value, the best capital structure should be targeted to fund the profitable investment projects.

The sixth hypothesis proposing that innovational performance is positively related to firm value got an empirical support as the value of t was at 3.39. The implication is that the manufacturing companies listed in IDX in the period of this research had applied several innovations in their business process, both in the production and in the form of major improvements in the company's business performance. In addition, the ability to innovate had also been applied in dynamic environments such as the collective ability of the employees to share and combine their knowledge as well as applying inter-functional coordination and network use. The results of this study imply that innovation is the main driver of corporate value, both innovation and R & D activities produce sensitive asset information, making it different from other tangible assets. Previous literature had examined how funding, ownership and governance provided incentives for internal innovation, and how companies obtained external funding sources. The results of this study are consistent with the research that have been done previously by (Acosta et al., 2016). The results of this study suggest that the companies' financial management, in satisfying the desire to invest, should make investments that have innovations in technology to create product excellence against the competitors. IDX investors also like the companies that regularly invest by utilizing new technology. The company's investment performance can increase the number of investment company innovations. Research also shows that manufacturing companies in Indonesia use innovation technology to trade competitive advantage based on strong research and development capabilities (R & D). Companies that have R & D capabilities are companies that have an important source of competitive advantage.

The seventh hypothesis proposing that innovational performance mediates the effect of investment on firm value got an empirical support as the Sobel Test showed that the direct effect of investment affected the firm value because it showed a p value at 0.0008 (less than 0.05). This indicated that the mediating role of the innovational performance was able to increase the influence of total investment to the firm value. Thus, the innovational performance was proven to mediate the effect of investment on the firm value. Therefore, this hypothesis was accepted. Besides, this also indicated that every increase in investment was expected to increase the value of the company. However, the increase in the firm value would be able to reach its full potential if the investment was made by utilizing innovation.

The companies are suggested to be able to manage their investments properly based on the funding sources. This research provides an understanding that the managers from public companies should expand and invest their companies in financial assets and real assets which are full of innovations and favored by the investors. Innovation is widely recognized to be very important for a company's ability to compete domestically and internationally, yet it is difficult to manage effectively. Therefore, R & D capa-

bilities can be a driver of corporate innovation performance because investors are very fond of a performance that can increase the firm Value.

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