The Effect of Financial and Non-Financial Factors on Firm Value

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ABSTRACT

This study aims to explain the impact of financial and non-financial factors, namely firm size, profitability, leverage, liquidity, activity ratio, CSR disclosures and environmental performance on firm value. This research is quantitative study with causality research design. Company Performance Rating Program in Environmental Management (PROPER) participating companies whose shares are listed on the IDX during 2015-2019 were the population of this study. The purposive sampling technique was chosen to obtain the sample of 35 companies with 140 units of analysis. This research applied a multiple linear regression test on panel data collected from secondary data. The results show the firm value can be explained by firm size, profitability, and activity ratio in a positive direction. Meanwhile, the negative influence is shown by leverage and liquidity and CSR disclosure & environmental performance cannot influence the firm value significantly. Managers are expected can optimize their asset management, because firm size, profitability, and activity ratio have a positive and significant effect on firm value and be careful of using debt, because liquidity and leverage are proven to have negative effect on firm value.

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INTRODUCTION

Firm value is one of the long-term corporate goals (Suandy, 2011). Firm value is an important concept for investors in making investment decisions, because firm value is an indicator of overall market valuation. According to Bahri (2016), investors require company information, both financial and non-financial as a basis for investment decision making and tools to assess management ability in managing a company. Meanwhile, firm value can be reflected in the stock price.

Based on Figure 1, it is known that stock prices during 2015-2018 tended to increase, but at a certain point, there was a quite significant decline. This could cause losses for investors that affected investment decisions and economic downturn. Thus, it needs to be known what factors affect the stock price as a reflection of firm value. Elkington (1998) argued that firm value is not only influenced by financial factors (single bottom line) but also non-financial factors (triple bottom line), namely social and environmental responsibility.

The previous studies still show inconsistent results. Hirdinis (2019) found the negative effect of firm size on firm value while Gathogo & Ragui (2014) found a positive relationship between the two. Pratama & Wiksuana (2016) stated profitability has a positive impact on firm value while Chen & Chen (2011) found evidence of profitability has a positive effect on firm value. Kodongo et al., (2015) found a positive effect of leverage on firm value while Pioh et al.,(2018) stated leverage has a negative effect on firm value. Furthermore, Fajaria & Insalita (2018) found the negative effect of liquidity on firm value but Hasbi (2015) stated that liquidity has a positive effect on firm value. Utami & Welas (2019) stated there is no effect of activity ratio to firm value whereas Astutik (2017) found evidence of the positive effect of activity ratio to firm value. Mukherjee & Nuñez, (2019) explained the absence of the effect of CSR disclosure on firm value. However, Nyeadi et al., (2018) found the positive effect of CSR disclosure on firm value, as well as Yu et al., (2009) who stated that there is no influence of environmental performance on firm value. Meanwhile, Lu & Taylor (2018) stated that environmental performance has a positive effect on firm value.

The purpose of this study is to examine the effect of financial and non-financial factors which include firm size, profitability, leverage, liquidity, activity ratio, CSR disclosure and environmental performance on firm
value. The originality of the research lies in the measurement of profitability variable using the ratio of operating profit margin (OPM). The reason is due to the researchers want to see the impact of profitability in terms of cost control and revenue optimization. This is important to see how influential cost control and revenue optimization is to the firm value besides the measurement with this ratio is also still rare in Indonesia.

Signalling theory, trade off theory and legitimacy theory are the theories used in this research. According to signalling theory, companies will try to send a positive signal to the market through financial information in order to obtain a positive response from the market (Spence, 1973). Trade off theory explains how much debt and equity a company must have so that there can be a balance between costs and profits (Modigliani & Miller, 1963). Meanwhile, legitimacy theory explains how social contract, which is a form of community support for corporate business processes which can drive the achievement of company goals (Dowling & Pfeffer, 1975).

Signalling theory explains the effect of firm size on firm value. Companies with many assets tend to have a small risk of bankruptcy, so that they can be an attraction for the market (Kusumayanti & Astika, 2016). Firm size based on total assets, explains that the ability to generate profits in large companies will be higher because the number of available assets is also more. Large profits are interpreted as good news which will then be responded to by the high value of the company because of the good assessment of investors. Manoppo & Arie (2016) and Pratama & Wiskuana (2016) found there is a positive relationship between firm size and firm value.

\[ H_1 : \text{Firm Value is Affected Positively and Significantly by Firm Size} \]

Signalling theory underlines the relationship of profitability with firm value. Profitability can be used to analyze corporate prospects in the future (Agustina, 2013). High profitability indicates good prospects of the company in the future, this is seen as a positive signal that can increase firm value (Solih & Taswan, 2002). Investors generally expect profits from equity participation. High profitability indicates a high rate of return on investment so that it can improve the trust of shareholders to continue investing. Previous research supporting this theory is suggested by Pioh et al., (2018) and Astutik (2017).

\[ H_2 : \text{Firm Value is Affected Positively and Significantly by Profitability} . \]

The relationship between leverage and firm value is underlain by signalling theory and trade off theory. Based on signalling theory, leverage is a signal that can influence investor decisions. Meanwhile, trade off theory states that retained earnings are the best source of internal funding. The use of debt at a certain level will affect investor perceptions. High leverage can be an indication of the magnitude of liquidation risks faced by the company (Rahayu & Sari, 2018). Liquidity risk reduces investor trust because it is seen as a negative signal (bad news), the impact is stock price and firm value decrease. Interest expense is the impact of the use of debt (Alarussi & Alhaderi, 2018). Too large interest expense can increase investment risk; even it can cause the company to go bankrupt. Therefore, investors tend to compare total debt with total assets in making investment decisions to avoid the risk of liquidation. Research by Mandalika (2016) and Fajaria & Isnalita (2018) found the negative effect of leverage on firm value.

\[ H_3 : \text{Firm Value is Affected Negatively and Significantly by Leverage Level} . \]

Figure 1. Stock Price Index

Signalling theory underlines the relationship of
liquidity with firm value. According to signalling theory, the proper allocation of funds is an indication of the company’s good performance which is able to increase firm value because it is seen as a positive signal by investors. The higher the proportion of current assets that can be used to pay off short-term liabilities, then the risk of additional costs that may arise due to the fulfillment of liabilities which past the time period can be avoided, for example late fees. Therefore, high liquidity is able to optimize firm value because it is considered as a positive signal for investors (Wijaya & Purnawati, 2013). Research by Hasbi (2015) and Novari & Lestari (2016) found evidence of a positive influence between liquidation and firm value.

**H₄**: Firm Value is Affected Positively and Significantly by Liquidity Level.

The relationship between activity ratio and firm value is underlain by signalling theory. High activity ratio reflects the effectiveness of asset management in obtaining income (Utami & Prasetiono, 2016). Activity ratio is a proof of the company’s success in managing the company’s assets. This is considered as good news, so that it is responded to with a significant increase in stock prices and firm value. Previous research by Nurkaila et al., (2019) and Misran & Chabachib (2017) found evidence that activity ratio has a positive effect on firm value.

**H₅**: Firm Value is Affected Positively and Significantly by Activity Ratio.

Currently the development of business is growing rapidly, many emerging new companies are taking part in taking the opportunity to win the market. Therefore, companies are required to be able to provide appropriate and adequate information for investors, both financial and non-financial. According to Elkington (1998) to maintain business sustainability, companies must also pay attention to social and environmental responsibility. The term of Corporate Social Responsibility Disclosure (CSR disclosure) refers to the form of corporate social responsibility to stakeholders. If the company does not disclose CSR, it can be a bad influence on the firm value because of the lack of support from the community (Gossling & Vocht, 2007).

Signalling theory and legitimacy theory underlie the relationship between CSR disclosure and firm value. Based on signalling theory, CSR disclosure is a signal that can influence investor decisions. According to legitimacy theory, CSR disclosure is a corporate social contract with the community, which is a form of public support for the company’s business processes so as to increase the value of the company. Research conducted by Nyeadi et al., (2018) and Choongo (2017) found a positive effect of CSR disclosure with firm value.

**H₆**: Firm Value is Affected Positively and Significantly by Corporate Social Responsibility Disclosure.

Based on the Indonesian CNN on August 30, 2019, there has been a closure of the Basamuk Bay by the Papua New Guinea Mineral Resources Authority due to alleged pollution of mining waste from the Ramu Nickel mining company. Since 2012, the company has received various rejections by residents because they often dump waste into the sea. The incident shows that the community is starting to realize the importance of environmental sustainability. The assessment of environmental performance in Indonesia is carried out by the Ministry of Environment and Forestry through PROPER.

The relationship between environmental performance and firm value is underpinned by signalling theory and legitimacy theory. Environmental performance is a positive signal that is positioned as a corporate strategy to maintain investor trust. Based on the theory of legitimacy, environmental responsibility can lead the company to obtain corporate legitimacy. Company legitimacy is a form of community support and permission. Public support will make various strategies prepared to optimize firm value can be achieved. Research by Lu & Taylor (2018), Clarkson et al., (2011) and Andriana & Anisykurlillah (2019) stated firm value is positively influenced by environmental performance.

**H₇**: Firm Value is Affected Positively and Significantly by Environmental Performance.

**RESEARCH METHODS**

This study used a quantitative approach with causality research design. The research data was panel data compiled from secondary data consisting of annual reports, sustainability reports and PROPER rating reports in 2015-2018 as well as financial reports in the first quarter of 2016-2019. PROPER participating companies which shares are listed on the Indonesia Stock Exchange were the population of this study. The research sample consisted of 35 companies with 140 units of analysis for 4 years. The step of determining the number of samples using a purposive sampling technique. Determination of the number of samples and the unit of research analysis can be seen in Table 1.

<table>
<thead>
<tr>
<th>No</th>
<th>Criteria</th>
<th>Beyond Criteria</th>
<th>Fit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>PROPER participating companies and their shares were listed on the Indonesia Stock Exchange during 2015-2018</td>
<td>-</td>
<td>61</td>
</tr>
<tr>
<td>2</td>
<td>The type of currency used is Rupiah</td>
<td>20</td>
<td>41</td>
</tr>
<tr>
<td>3</td>
<td>Companies with profit achievement every period (no loss)</td>
<td>6</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td>Total samples selected</td>
<td>-</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td>Total analysis units for 4 years</td>
<td>-</td>
<td>140</td>
</tr>
</tbody>
</table>
Operational definitions of variables that explain the definition and measurement of variables are explained in Table 2. Data on this research variable was taken by downloading annual report annually. Meanwhile, the firm value data was taken from company data in the first quarter of the following year after the book year ends. This study used descriptive statistical test and multiple linear regression test with a significance level of 5%.

RESULTS AND DISCUSSIONS

Based on table 3, there are still some companies in Indonesia that have not implemented environmental responsibility in accordance with government regulations, this is evidenced by the minimum value on the environmental performance variable valued at 2 (red ranking). There is only one company that obtained a gold rating in the PROPER rating out of 35 companies. Then, the disclosure of social responsibility in Indonesia is also still low at 33%.

Before conducting a hypothesis test, the classical assumption test is performed first. The results of the research data fulfil all assumptions namely normality, multicollinearity, heteroscedasticity and autocorrelation. Then the Adjusted R2 value is 0.271, indicating that the independent variable can explain the dependent variable by 27.1%, while the other 72.9% is explained by other variables outside the research model. Conclusions from the results of the analysis test conducted with the help of the application SPSS v 25 can be seen in table 4.

Table 2. Definition of Variables and the Measurement

<table>
<thead>
<tr>
<th>No</th>
<th>Variables</th>
<th>Definition</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Firm value</td>
<td>It is an assessment of the price of a company that investors are willing to pay. (Jusriani, 2013)</td>
<td>( \text{Tobin's } q = \frac{(\text{MVE} + \text{DEBT})}{\text{TA}} ) (Nyeadi et al., 2018)</td>
</tr>
<tr>
<td>2.</td>
<td>Firm size</td>
<td>Also called book value, which is the accounting net worth of the company. (Thavikulwat, 2004)</td>
<td>( \text{Firm size} = \ln(\text{Total asset}) ) (Manoppo &amp; Arie, 2016)</td>
</tr>
<tr>
<td>3.</td>
<td>Profitability</td>
<td>Is the ability of company to generate profits every period. (Pioh, 2018)</td>
<td>( \text{OPM} = \frac{\text{EBIT}}{\text{Sales}} ) (Hanafi &amp; Halim, 2005)</td>
</tr>
<tr>
<td>4.</td>
<td>Leverage</td>
<td>Used to measure how much debt can be financed by company assets. (Kasmir, 2014)</td>
<td>( \text{DAR} = \frac{\text{Total debt}}{\text{Total asset}} ) (Kasmir, 2014)</td>
</tr>
<tr>
<td>5.</td>
<td>Liquidity</td>
<td>Is the ability of company to meet its short-term obligations. (Hanafi &amp; Halim, 2005)</td>
<td>( \text{CR} = \frac{\text{Current asset}}{\text{Current liabilities}} ) (Hanafi &amp; Halim, 2005)</td>
</tr>
<tr>
<td>6.</td>
<td>Activity ratio</td>
<td>Used in measuring the effectiveness of management to utilize resources so as to generate profits. (Murhadi, 2015)</td>
<td>( \text{TAT} = \frac{\text{Sales}}{\text{Total asset}} ) (Misran &amp; Chabachib, 2017)</td>
</tr>
<tr>
<td>7.</td>
<td>Corporate social responsibility disclosure</td>
<td>Is a form of corporate social responsibility to the public to get legitimacy from stakeholders. (Ardiyanto &amp; Haryanto, 2017)</td>
<td>( \text{CSRDi} = \frac{\text{Number of item}}{\text{Total items}} ) (Nyeadi et al., 2018)</td>
</tr>
</tbody>
</table>
| 8. | Environmental performance  | Company performance to contribute to environmental preservation (Haholongan, 2016) | 5 = Gold Rating  
4 = Green Rating  
3 = Blue Rating  
2 = Red Rating  
1 = Black Ranking (Tjahjono, 2013) |

Source: Previous Studies

Table 3. Results of Descriptive Statistics Test

<table>
<thead>
<tr>
<th>Variables</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firm Size</td>
<td>140</td>
<td>27.8</td>
<td>33.47</td>
<td>29.835</td>
<td>1.45641</td>
</tr>
<tr>
<td>Profitability</td>
<td>140</td>
<td>0.00</td>
<td>1.02</td>
<td>0.1415</td>
<td>0.12508</td>
</tr>
<tr>
<td>Leverage</td>
<td>140</td>
<td>0.04</td>
<td>0.82</td>
<td>0.3984</td>
<td>0.16678</td>
</tr>
<tr>
<td>Liquidity</td>
<td>140</td>
<td>0.58</td>
<td>11.63</td>
<td>2.6182</td>
<td>1.92783</td>
</tr>
<tr>
<td>Activity ratio</td>
<td>140</td>
<td>0.12</td>
<td>3.10</td>
<td>1.0448</td>
<td>0.56970</td>
</tr>
<tr>
<td>CSR Disclosure</td>
<td>140</td>
<td>0.06</td>
<td>0.63</td>
<td>0.3329</td>
<td>0.13410</td>
</tr>
<tr>
<td>Environmental Performance</td>
<td>140</td>
<td>2.00</td>
<td>5.00</td>
<td>3.1315</td>
<td>0.50964</td>
</tr>
<tr>
<td>Firm Value</td>
<td>140</td>
<td>0.09</td>
<td>21.39</td>
<td>2.5007</td>
<td>3.51508</td>
</tr>
</tbody>
</table>

Source: data processed (2020)
The Effect of Firm Size on Firm Value

Firm value is positively and significantly influenced by firm size. This result is consistent with signalling theory, firm size based on total assets, explaining that the ability to generate profits in large companies will be higher because the number of assets available for use is also more, it is considered as a positive signal to the market. Large companies will have a more stable financial condition, have a small risk of bankruptcy and this is one of the attractions of the company in the eyes of investors (Kusumayanti & Astika, 2016). Previous research that is consistent with this research is research by Manoppo & Arie (2016), Gathogo & Ragui (2014) and Pratama & Wiksuana (2016) which found that firm value is positively and significantly influenced by firm size.

The Effect of Profitability Level on Firm Value

Firm value is positively and significantly influenced by profitability. Based on signalling theory, profitability can be used to analyze the company’s prospects in the future (Agustina, 2013). Investors generally expect profits from equity participation. High profitability indicates a high rate of return on investment so that it becomes a positive signal that can increase firm value. Previous research in line with this research is research by Pioh et al. (2018), (Astutik, 2017) and (Chen & Chen, 2011).

The Effect of Leverage Level on Firm Value

Firm value is negatively and significantly affected by leverage. This result is consistent with signalling theory and trade off theory. High value of leverage can be an indication of the magnitude of liquidation risk faced by the company, this is caused by too high proportion of debt (Rahayu & Sari, 2018). High liquidation risk can reduce investor trust because the information is seen as a negative signal, the impact is stock prices and firm value are low.

High leverage indicates that most of the company’s funding sources come from debt (trade off theory). High interest expense is a consequence of the high level of leverage. High interest costs can make company profits decrease. Thus, in making investment decisions, investors will tend to compare the company’s total debt with its total assets to avoid the risk of liquidation. Previous research that is consistent with this research is research by Mandalika (2016), Pioh et al., (2018) and Fajaria & Isnalita (2018).

The Effect of Liquidity Level on Firm Value

Firm value is negatively and significantly affected by liquidity. This result contradicts the signalling theory, high liquidity should be a positive signal for the market because it indicates the company’s good performance in paying off short-term debt, so that the risk of additional costs that can arise due to the fulfilment of obligations past the time period can be avoided.

Munawir (2002) explained high liquidity ratio has not been able to guarantee the fulfilment of the company’s short-term liabilities, because when current assets are dominated by huge values of inventories and receivables but low turnover rates, then there is not enough funds owned by the company to meet its short-term obligations. In addition, high liquidity followed by an increase in free cash flow is also a negative signal for the market, because it allows actions to hold dividends by the company on the rights of investors. Previous research that is in line with this research is research by Astutik (2017), Fajaria & Isnalita (2018) and Sari & Sedana (2020).

The Effect of Activity Ratio on Firm Value

Firm value is positively and significantly influenced by activity ratio. This result is consistent with signalling theory, high activity ratio reflects the effectiveness of the company in utilizing assets to obtain revenue (Utami & Prasetiono, 2016). High activity ratio can be a proof of a company’s success and is seen as good news,
thus creating high firm value. Previous research that is in line with this research is research by Astutik (2017), Nurlaela et al., (2019) and Misran & Chabachib (2017).

The Effect of Broad Corporate Social Responsibility Disclosure on Firm Value.

Firm value is not affected by corporate social responsibility disclosure. The result of this study contradicts the signalling theory, CSR disclosure which is a corporate social contract is a form of community support for the company’s business processes should be able to increase investor trust in the sustainability of the company’s business apparently unable to explain changes in firm value. This result can occur because the other side of CSR disclosure is the emergence of the costs to carry out CSR activities. Not infrequently, the amount of CSR costs incurred by the company is not commensurate with the response received from the public or investors. This is because the benefits of CSR are not always visible in the short term. Previous research that is in line with this research is research (Mukherjee & Nuñez, 2019), (Madorran & Garcia, 2016) and (Daszyńska-Zygadlo et al., 2016).

The Effect of Environmental Performance on Firm Value.

Firm value is not influenced by environmental performance. The result of this study contradicts the signalling theory. Although many experts stated that environmental performance could increase firm value, in reality, the environmental performance stated in the PROPER rating cannot influence investors in determining investment decisions.

Like CSR disclosure, the implementation of environmental performance also requires huge costs and the response cannot be ascertained in time, so this can be the reason why environmental performance does not affect on firm value. Based on table 3, it is known that the average PROPER rating in Indonesia is blue rating, during 2015-2018, this result also did not change much. This indicates environmental performance is not a competitive advantage that can be an added value in the eyes of investors because some big companies also have it. Previous research that is in line with this research is research (Yu et al., 2009), (Sri Tjahjono, 2013) and (Rokhmawati et al., 2015).

CONCLUSIONS

Firm value is positively and significantly influenced by variables of firm size, profitability, and activity ratio (TAT). Meanwhile, leverage and liquidity have a negative effect on firm value, CSR disclosure and environmental performance have no effect on firm value. Based on the results of the study, non-financial factors consisting of CSR disclosure and environmental performance have not been able to influence the decisions of the investors because both of them have been proven to have no effect on firm value. These results can explain the phenomenon in table 3, where in the period 2015-2018 there was a decrease in the number of companies that participated in PROPER and the low level of CSR disclosure in Indonesia. The managers are expected to be able to further optimize their asset management, because firm size, profitability and activity ratios have a positive and significant effect on investor decisions and be careful about the use of debt, because liquidity and leverage are proven to have a negative effect on investors’ decision making.

REFERENCES


