GENDER DIVERSITY AS THE MODERATING FACTOR IN THE INFLUENCE OF FINANCIAL FACTORS ON THE FIRM VALUE: A STUDY ON COMPANIES LISTED IN KOMPAS 100 INDEX in 2015-2019

Sri Sumira, Wiwick Prihandini
Perbanas Institute Jakarta, Indonesia
Jl. Perbanas, Karet Kuningan, Setiabudi, Jakarta Selatan 12940.
Email: srsumira@gmail.com and wiwiek@perbanas.id

Abstract: This study aims to analyze the influence of financial factors on firm value with gender diversity as the moderating variable. Male directors tend to show risk-takers traits, whereas women directors are more risk-averse which become effective in decision-making. Gender diversity is proxied by the presence of women on the board of directors and on the board of commissioners. The samples are companies admitted in Kompas 100 index and listed on IDX from 2015 to 2019. Firm value was measured by using the Tobin's Q formula. The data were processed using Eviews 11. To determine the model for the hypothesis testing, the Chow test and Hausman test were carried out, and fixed effect model was selected. This study proves that the presence of women can weaken the relationship between profitability and firm value, and it can strengthen the relationship between activity ratio and firm value. However, the presence of women cannot strengthen or weaken the influence of leverage and liquidity on firm value. It is recommended that a company has women representation in the structure of the board because women directors have more sensitivity to risk which can compensate the character of male directors who are risk-takers.

Keywords: firm value, profitability, leverage, current ratio, activity ratio, gender diversity, companies in Kompas 100 index

1. Introduction
The tight competition in the business world is a reasonable trigger for a company management to make sure their company is delivering its best performance. To help the management, the application of the digital economy in the online economic system has improved company performance (Soemarwoto, 2020). The quality of the company performance has an influence on the company value which affects the interests of shareholders to make or withdraw their investment (Susanti, Mintarti, & Asmapane, 2018).

Financial statements that can be used for decision-making convey the performance, financial position, and cash flow of the company. In addition, financial statements serve as a medium for conveying financial information and management's accountability for its performance (Pujiono & Imelda, 2020). Information about a company’s earnings becomes the most important component in interpreting the quality of the company’s financial performance in each period. Earnings can also affect the amount and availability of funds that can be used by the company, as well as the amount
of cost of capital (COC) that must be accounted for (Subhekti, 2008). The company's earnings also indicate the company's value.

Besides financial performance, a company’s high value is indicated by its high stock price (Putra & Lestari, 2016). This company’s value is one of the most important factors in the sustainability of a company. If the value of a company increases, the wealth of its shareholders also increases. Thus, a company’s high value can increase market confidence and the company’s prospects. A company that continuously experiences an increase in its company’s value can attract more investors to invest in its share capital (Rinahaq & Widyawati, 2020).

A company that has gone public makes efforts to convince investors that the company is the best investment for them. Therefore, effective financial performance and management are needed for the sustainability and growth of the company (Attari & Raza, 2012).

An adequate assessment of a company’s financial position and performance as well as an improvement of its good corporate governance can be the added values to convince investors (Rinahaq & Widyawati, 2020). Several factors can affect the value of a company. To assess the performance of a company, its financial ratios are one of the media which can be used to analyze its financial statements (Siregar & Vivian, 2015). The key financial ratios include financial leverage, profitability, liquidity, activity, and market. In their study, Putra & Lestari (2016) state that the ratio of return on assets (ROA) and debt-to-asset Ratio (DAR) affect the company’s value. In another study, Suwardika & Mustanda (2017) conclude that two financial ratios that affect the firm value are debt-to-equity ratio (DER) and profitability. However, Iskandar, Mandra, & Oktariani (2020) prove that leverage measured by DER has no effect on the firm value.

Whether a company’s value goes up or goes down cannot be separated from the decisions made by the board of directors. Jamilah, Fanani, & Chandrarin (2007) assert women sitting on the board tend to be more efficient and effective in processing information when complexity arises in decision-making process than an entire board consisting of men only. The board diversity influences the decision-making process which eventually affects the company's performance. The proportion of men and women in the board of directors can vary in numbers (Handayani & Panjaitan, 2019).

There are two advantages of having women representation on the board of directors. First, women do not belong to ‘the old boy networks’; thus, women tend to be more independent. Second, women have more ability to understand the company's needs which are related to customers and opportunities (Fauziah, 2018). In general, the factors described above can be strengthened or weakened by using the presence (proportion) of women on the company’s board. In short, gender is one of the important variables that can affect the decision-making process in a company (Kusumaningrostati & Mutasowifin, 2014).

According to Jensen & Meckling (1976), the way to reduce agency costs is to increase managerial ownership, or share ownership by management. Managerial ownership is one of the factors that are believed to influence the company’s value. The higher the share ownership by the board of directors/commissioners, the higher the value of the company and the lower the financial risk. Managerial ownership can serve as a bridge that can increase the shareholders’ confidence in the company's performance and can improve the relations with the creditors (Sulistyanto, 2008).

The agency theory explains the relationship between financial factors and the company’s value. By considering the previous studies and the existence of the agency conflicts, this present
study examines four financial factors: financial leverage, profitability, liquidity, and the activity ratio on the value of the firm moderated by gender diversity.

2. Theoretical Framework And Hypothesis Development

2.1 Theoretical Framework

2.1.1 Agency Theory

According to Godfrey, Hodgson, Tarca, Hamilton, and Holmes (2010), the agency theory serves as the framework to examine the contracts between the principals and the agents which are used to carry out several economic activities. The agents will prioritize the interests of the principals, but agency problems may arise because there might some inducements that make the agents to act as if they were trying to maximize the welfare of the principals.

The agency theory was proposed by Jensen and Meckling in 1976 in order to answer the agency problems that may occur when the cooperating parties have different goals and divisions of labor. Agency theory talks about a contract between the agents and the principals. By law, an agent is someone who is hired to represent the interests of the principals who want the agent to perform certain tasks in the best interests of the principals, and the tasks usually include the delegation of decision-making authority from the principals to the agent (Yuliana, 2011).

Furthermore, Jensen & Meckling (1976) explain that a unit of analysis in agency theory is an efficient contract which has two factors. First, agents and principals have symmetrical information. Second, the fees received by the agents are worth the risks they must take when doing the tasks; thus, the bigger the risks, the bigger the returns that the agents earn. Therefore, the management of the tasks must also be put into consideration, controlled, and managed properly in order to comply with the rules and regulations based on the agency theory. Conflicts that may occur can be resolved by managing a good corporate governance.

From the perspective of opportunistic behavior, a company management (as the agents) can use the opportunity to maximize their personal benefits in terms of getting a bigger amount of money from the bonus plan which is very dependent on the proportions of the management's performance. Similarly, the principals also have the interests in getting high returns on the company’s stable earnings. Conflicts between the agents and the principals have increasingly culminated with the existence of information asymmetry in which managers as the agents have more (updated) information than the external parties, and then the managers are able to take dysfunctional behavior such as moral hazard and adverse selection (Ramadhona, 2017). The managers conduct this dysfunctional behavior by the practice of income smoothing so that the financial statements look better than the actual conditions. The relationship between the principals and the agents is often determined by accounting figures; thus, it induces the agents to figure out how these accounting figures can be used as a means of maximizing their self-interests (Jessica & Dewi, 2019).

2.1.2 Feminist Theories

Terminologically, gender can be defined as the cultural expectations of men and women. Thus, gender diversity is a cultural concept that is used to distinguish the comparison of roles, behavior, mentality, and emotional characteristics between men and women that have been
developed in the community (Rokhmansyah, 2016). Utaminingsih (2017) explains that feminist theories attempt to study various social problems related to women's lives. Feminist theories focus on the equality between women and men including the equality of rights and obligations in all domains (Winasis & Yuyetta, 2018). Furthermore, Hidayati (2018) mentions that feminism is a framework in social life that has evolved from a woman-centered perspective.

In another study, Krisbiyantoro (2016) explains that feminist theories can also solve problems regarding the positions and roles of women in various aspects of life, and the theories can be used as the tools to analyze gender inequality. The aim of feminism is to understand the nature of gender inequality by looking at the life experiences and the social roles of a woman (Astuti, 2011). Feminist thoughts also encourage the movements to achieve gender equality. The existence of these thoughts is driven by the women's oppressions and the women's liberation movement from racism, stereotyping, sexism, and phallogocentrism (Krisbiyantoro, 2016).

Fitriani (2015) presents a list of several traits possessed by female leaders. They are the ability to be persuasive, to be more empathetic, to be flexible, to be considerate, and to help her staff in their work. Great female leaders generally have strong charisma, persuasive, energetic, confident, and have a strong will to get things done. Female leaders are basically willing to take risks just like men, but women have more considerations, pay attention to every detail equally, and are being careful to avoid big risks.

Feminist theories focus on the behavior of gender diversity and its effect on financial statements and financial performance. These theories also strengthen the position of men and women in decision-making processes and their executive positions, so the proportion of men and women on the executive board can influence business decisions. Men who are generally more courageous in making decisions tend to have the characteristics of risk-taking, while women tend to display a risk-averse characteristic which is reflected in their being careful in making decisions (Winasis & Yuyetta, 2018).

Nevertheless, from the explanation above, women’s characters can be considered as more complete. For example, the risk-averse trait of women enables them to be more perceptive which can counterbalance the men’s character who tend to be risk-takers.

2.1.3 Financial Leverage

Financial Leverage describes the extent of the company's assets which are financed by the company's debt. Naftalia & Marsono (2013) mention that financial leverage can be measured by the ratio of total debts and total assets (debt-to-asset ratio/FL). In the ratio of debts and assets (to measure leverage), some portions of the assets are used to guarantee the debts. The ratio depends on the conditions of the debt agreement (Swastika, 2017). In addition, leverage is used to measure the extent of the company’s debts which is used to finance its assets. This indicates the degree of the company's risk which can influence the value of the company. The larger the debts, the higher the risks. As financial leverage increases, the risks faced by the capital owners and the creditors will also increase. When the investors or creditors are risk averse (avoiding FL), they may be reluctant to invest or lend funds to a company which has a high leverage ratio (Subhekti, 2008).
2.1.4 Profitability

Profitability is a ratio that measures a company's overall performance and efficiency in managing its assets, liabilities, and wealth. This ratio aims to measure the efficiency of the company's activities and the company's ability to yield earnings (Sugiono & Untung, 2008). In other words, profitability describes the company's ability to earn profits. The level of profitability can be calculated by comparing its earnings, total assets, sales, and capital. Profitability analysis can be used to evaluate a company's rate of return on investment (Jessica & Dewi, 2019). Companies tend to minimize its revenues and smooth out its earnings when they obtain a high level of profitability. These revenues certainly affect the companies' ability to pay off their debts and increase their funding for managing their operations (Hastuti, 2017).

Profitability is the level of net income generated from a company's operations. This net income (profit) generated by the company becomes a yardstick for investors in assessing the management performance and the value of the company, and it is taken into consideration when making investment decisions. The fact that investors give great attention to the level of company’s profitability can motivate management to commit income smoothing (Subhekti, 2008).

The fluctuations in a company’s profitability makes the company tend to commit income smoothing, especially when the company has set a bonus compensation scheme based on the amount of its profits (Juniarti & Corolina, 2005). Companies with a low level of profitability have a tendency to commit greater income smoothing actions. Investors are not attracted to companies with low profitability; thus, the management of those companies may attempt to implement a profit policy in order to increase the value of the company (Subhekti, 2008).

2.1.5 Liquidity

Kariyoto (2017) defines liquidity of a company as its ability to meet its short-term financial obligations. The liquidity of a company can be seen from the size of its current assets. Current assets are those that are not difficult to convert into cash, such as cash, receivables, inventories, and securities (Malia & Andayani, 2015). The higher the liquidity ratio, the better the company's financial position (Kustiyaningrum, Nuraini, & Wijaya, 2017).

According to Kurniawan & Suwarti (2017), a company is liquid if it is able to meet its financial obligations on time—in other words, the company has payment instruments or current assets that are larger than their current liabilities. Similarly, Wijaya (2013) states that the indicator of the liquidity ratio is the current ratio which considers the weight of a company's current assets against its current liabilities. The bigger the amount of the current assets to cover current liabilities, the higher the indication that the current liabilities can be paid. If current liabilities increase faster than current assets, then the current ratio will decrease. This is in line with the financial theory stating that the level of liquidity is very important in determining the company's operations.

To sum up, liquidity is the company's ability to pay its short-term obligations. Liquidity is one of the success factors of the company; therefore, liquidity is crucial. Shareholders consider companies with good liquidity have good performance, and eventually, it may attract more investments to the companies. Liquidity can be measured by using the current ratio, a comparison between current assets and current liabilities (Putra & Lestari, 2016).
2.1.6 Activity Ratio

The activity ratio measures the liquidity of certain assets of a company and how effective the company can manage its assets and resources. The activity ratio aims to measure the effectiveness of a company in managing its funds (Sugiono & Untung, 2008). If the company has big assets, its cost of capital is also high; thus, its profits decrease. The activity ratio describes the overall activities carried out by the company in its operations, such as buying, selling, and other activities (Rinnaya, Andini, & Oemar, 2016).

In other words, the activity ratio shows how the resources have been used optimally by the company. Measuring the activity ratio for businesses has the benefits of creating a yardstick for business development in the same line of operations, and this activity ratio can also be used to identify problems (Astuti, Sembiring, Supitriyani, Azwar, & Susanti, 2021).

This is in line with Kasmir (2010) who mentions that the activity ratio is used to assess the company's ability to conduct its daily operational activities. The higher the value of the activity ratio, the higher the number of sales the company gets for every rupiah of its assets. It can also be interpreted that the higher the activity ratio, the higher the company’s value. Moreover, it is possible to increase the value of the company which is reflected in the increase of its stock prices.

2.2 Conceptual Framework

This study is conducted to examine the effects of financial ratios on the value of the firm with gender diversity as the moderating variable in companies which are registered in Kompas100 index and which are listed on the Indonesia Stock Exchange in 2015-2019. The framework is described in Figure 1.

![Figure 1. Conceptual Framework](image-url)
2.3 Hypothesis Development

2.3.1. The Influence of Financial Leverage on the Value of the Firm

Rudangga & Sudiarta (2016) conclude that leverage has a positive effect on the firm value. Leverage describes the use of debts to finance the company’s operations. Leverage management is very important because a higher use of leverage indicates a higher value of a company due to tax protection. Based on this notion, this present study proposes the following hypothesis:

H1: Financial leverage has a positive influence on the value of the firm.

2.3.2. The Influence of Profitability on the Value of the Firm

Profitability is the company's ability to generate profits, and it is measured by using the ratio between the net profit after tax and the total assets. A company that has a high profitability is more flexible in committing income smoothing compared to another company with low profitability because its management knows the company's ability to generate profits in the future (Paramita & Isarofah, 2016). Based on this notion, this present study proposes the following hypothesis:

H2: Profitability has a positive influence on the value of the firm.

2.3.3. The Influence of Liquidity on the Value of the Firm

Liquidity is the company's ability to meet its short-term obligations by using its current assets (Jessica & Dewi, 2019). The current ratio is the indicator of the liquidity ratio which considers the weight of a company's current assets against its current liabilities (Wijaya, 2013). Based on this notion, this present study proposes the following hypothesis:

H3: Liquidity has a positive influence on the value of the firm.

2.3.4. The Influence of Activity Ratio on the Value of the Firm

The activity ratio shows how quickly current assets can be converted into cash (Sianipar, Tarigan, Jubi, & Inrawan, 2015). Rinnaya et al. (2016) prove that the activity ratio has an effect on the firm value because, within their research period, the companies used their assets effectively. A company that uses its assets effectively tends to use very small debts to finance its sales. Based on this notion, this present study proposes the following hypothesis:

H4: Activity ratio has a positive influence on the value of the firm.

2.3.5. Gender Moderates the Influence of Financial Leverage on the Value of the Firm

Women have many traits that most men do not have. For example, women take care of the employees, have sharp business intuition, and display detailed nature in analyzing business impacts and risks. These allow women to compensate the traits of male leadership who tends to be less concerned about risks; moreover, women can encourage a diversity of perspectives and wider inputs to deal with risks and strategic issues in the future (Maghfiroh & Utomo, 2019). Based on this notion, this present study proposes the following hypothesis:

H5: Gender diversity moderates the influence of financial leverage on the value of the firm.
2.3.6. Gender Moderates the Influence of Profitability on the Value of the Firm

In general, the company's goal is to get maximum profits; thus, the position of finance director is strategic because a finance director can create various policies related to how to maximize the profits (Sihite, 2012). The presence of women on the board of directors can increase the company's profitability which has an impact on an increase in the value of the company because women directors tend to have traits that are in line with the company's regulations and policies (Kurniawati, Kanlanlua, & Susetyo, 2017). Based on this notion, this present study proposes the following hypothesis:

H6: Gender diversity moderates the influence of profitability on the value of the firm.

2.3.7. Gender Diversity Moderates the Influence of Liquidity on the Value of the Firm

Yendrawati & Mukti (2015) state that the presence of more efficient women on the board can trigger the increase in the company's ability to implement better strategies to overcome social, economic, and environmental problems, and it can also make investors react positively. Companies with greater gender diversity in top management and executive boards can perform better than those with lower gender diversity (Devika & Yuliana, 2020). This is in line with (Kristina & Wiratmaja, 2018) which state that a company's reputation and value can be increased by the involvement of women in the company's board structure, which reflects that there is no discrimination, and the company provides equal opportunities for anyone to become a part of the board. In another study, Kurniawati et al. (2017) explain that the presence of women on the board of directors can reduce the company’s liquidity because of the nature of female directors who tend to obey company policies and company regulations strictly. Based on this notion, this present study proposes the following hypothesis:

H7: Gender diversity moderates the influence of liquidity on the value of the firm.

2.3.8. Gender Moderates the Influence of Activity Ratio on the Value of the Firm

Women are leaders who can communicate openly, can encourage collaborative decision-making, and focus on company goals (Sihite, 2012). The presence of women in the board structure can encourage the improvement of the company's financial performance because they have more concerns for the environment and its surroundings (Adams & Ferreira, 2009). This is in line with Liu, Wei, & Xie (2013) who are of the opinion that the perspective of life and the experience possessed by women on the board enable them to connect their company with various scopes such as female customers, female employees, female workers, as well as other female stakeholders. Based on this notion, this present study proposes the following hypothesis:

H8: Gender diversity moderates the influence of activity ratio on the value of the firm.

3 Research Method

This present study uses a quantitative research method to test the hypotheses by using the firm value as the dependent variable, whereas financial leverage, profitability, liquidity, and asset turnover become the independent variables, and gender diversity serves as the moderating variable. Companies that are registered in Kompas 100 index within 2015–2019 become the units of analysis in this study.
3.1. Operational Variable

3.1.1 Dependent Variable (the Firm Value)

The firm value is measured by using the calculation of Tobin's Q ratio. Tobin's Q is an indicator to measure the company performance, especially to calculate the firm value which shows the company performance in managing its company assets. The following formula is used to calculate the firm value using the Tobin's Q ratio (Sudiyatno & Puspitasari, 2010).

\[
Q = \frac{MVS + D}{TA}
\]

where:
- \( Q \) = Tobin’s Q company’s value
- \( MVS \) = Market value of all outstanding stocks (equity market value)
- \( D \) = Total debts
- \( TA \) = Total assets

3.1.2. Independent and Moderating Variables

Table 3.1 summarizes the definitions and indicators of the independent and moderating variables used in this study.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Operationalization of Independent and Moderating Variables</th>
<th>Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Leverage</td>
<td>The company's ability to finance its assets or investments with its total liabilities (Paramita &amp; Isarofah, 2016).</td>
<td>DAR = ( \frac{Total Liabilities \times 100%}{Total Assets} )</td>
</tr>
<tr>
<td>Profitability</td>
<td>The company's ability to make profit and measure the level of effectiveness of its management.</td>
<td>ROA = ( \frac{Net Income \times 100%}{Total Assets} )</td>
</tr>
<tr>
<td>Liquidity</td>
<td>A tool to measure the company's ability to meet its short-term obligations (Nur'aidah, 2019).</td>
<td>CR = ( \frac{Total Current Assets \times 100%}{Total Current Liabilities} )</td>
</tr>
<tr>
<td>Asset turnover</td>
<td>The activity ratio is a ratio that measures the efficiency of asset management. The activity ratio aims to measure the company's efficiency in operating funds (Sugiono &amp; Untung, 2008).</td>
<td>TATO = ( \frac{Total Sales \times 100%}{Total Assets} )</td>
</tr>
<tr>
<td>Gender Diversity</td>
<td>Distinctive roles, positions, responsibilities, and a division of labor between men and women determined by the community based on the nature of women and men deemed appropriate by norms, customs, beliefs or habits of society (Central Bureau of Statistics).</td>
<td>Gender = ( \frac{(Number of women in the Board of Commissioners + Number of women in the Board of Directors)}{Number of board members} )</td>
</tr>
</tbody>
</table>
3.2. Population and Samples

This study uses the two-stage sampling techniques. First, following Dwialesi & Darmayanti (2016), judgment sampling is used because Kompas100 Index includes companies that have a stock index with good fundamentals and performance and represent 70 to 80 percent of the total market capitalization on IDX with a wide range of industrial sectors. The second technique is non-probability sampling with purposive sampling technique.

This purposive sampling is chosen because not all samples meet the criteria that match the phenomenon under study. The criteria of sample for this research are:

1. Companies that did not suffer losses during 2015-2019;
2. Companies whose financial statements have been audited;
3. Companies that had been admitted to Kompas100 Index in one accounting period;
4. Companies that provided the necessary data for this study.

4 Results And Discussion
4.1 Description of Research Objects

In this study, the object of study are the companies listed on the IDX in 2015-2019 and are also included in Kompas 100 Index which were selected by using the purposive sampling method according to a set of criteria. The focus of this study is to examine and analyze the effect of financial leverage, profitability, liquidity, and managerial ownership on firm value with gender as the moderating variable. This study uses data for 5 years between 2015 and 2019, in the hope of obtaining more accurate results. The number of companies in Kompas 100 Index was 546 companies from 2015 to 2019. Based on data obtained from IDX website, from a total of 546 companies, there were 362 companies that did not provide research variable data, and 27 companies experienced losses. As a result, there were 157 companies in Kompas 100 index that were selected as the samples in this study.

<table>
<thead>
<tr>
<th>Companies that had been admitted to Kompas 100 Index in one accounting period</th>
<th>Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Observation Objects</td>
<td>546</td>
</tr>
<tr>
<td>Companies that did not meet the criteria:</td>
<td></td>
</tr>
<tr>
<td>27 companies suffered losses during 2015-2019</td>
<td>(27)</td>
</tr>
<tr>
<td>362 companies did not provide the necessary data for this study</td>
<td>(362)</td>
</tr>
<tr>
<td><strong>The number of samples that met the criteria</strong></td>
<td><strong>157</strong></td>
</tr>
</tbody>
</table>

Source: IDX website, www.idx.co.id (data processing, 2021)
4.2. Data Analysis

Table 3.
Statistical Tests

<table>
<thead>
<tr>
<th>Variable</th>
<th>TOBINSQ</th>
<th>ROA</th>
<th>CR</th>
<th>DAR</th>
<th>ACT</th>
<th>GEN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>1.601233</td>
<td>0.070357</td>
<td>2.746639</td>
<td>0.540496</td>
<td>0.637998</td>
<td>0.104769</td>
</tr>
<tr>
<td>Median</td>
<td>1.150204</td>
<td>0.049400</td>
<td>1.415200</td>
<td>0.480000</td>
<td>0.491458</td>
<td>0.090909</td>
</tr>
<tr>
<td>Maximum</td>
<td>6.837807</td>
<td>0.351000</td>
<td>75.95000</td>
<td>5.642955</td>
<td>4.319644</td>
<td>0.428571</td>
</tr>
<tr>
<td>Minimum</td>
<td>0.168665</td>
<td>-0.008500</td>
<td>0.005000</td>
<td>0.000600</td>
<td>0.045434</td>
<td>0.000000</td>
</tr>
<tr>
<td>Std. Dev</td>
<td>1.130713</td>
<td>0.064187</td>
<td>7.122191</td>
<td>0.633674</td>
<td>0.610215</td>
<td>0.111113</td>
</tr>
<tr>
<td>Observation</td>
<td>157</td>
<td>157</td>
<td>157</td>
<td>157</td>
<td>157</td>
<td>157</td>
</tr>
</tbody>
</table>

Table 3 shows an interesting fact that gender diversity measured by the proportion of women in the board structure has an average of 0.10476 or 10.476%. This means that the number of women on the board is not more than 10% of the total members of the board of directors and board of commissioners. Therefore, it is relatively still very few.

4.3 Classical Assumption Tests
1. Multicollinearity Test

The multicollinearity test is needed to determine whether or not there is a linear relationship between the independent variables. Table 4 shows the multicollinearity test results.

Table 4.
Results of the Multicollinearity Test

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient Variance</th>
<th>Uncentered VIF</th>
<th>Centered VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>0.029208</td>
<td>4.790815</td>
<td>NA</td>
</tr>
<tr>
<td>ROA</td>
<td>1.880804</td>
<td>2.789960</td>
<td>1.262880</td>
</tr>
<tr>
<td>DAR</td>
<td>0.016259</td>
<td>1.843117</td>
<td>1.064035</td>
</tr>
<tr>
<td>CR</td>
<td>0.000122</td>
<td>1.158436</td>
<td>1.007620</td>
</tr>
<tr>
<td>ACT</td>
<td>0.020281</td>
<td>2.584850</td>
<td>1.230799</td>
</tr>
<tr>
<td>GEN</td>
<td>0.507681</td>
<td>1.935545</td>
<td>1.021524</td>
</tr>
</tbody>
</table>

In Table 4, the value of the variance inflation factor (VIF) for the ROA variable is 1.26280, DAR is 1.064035, CR is 1.007620, ACT is 1.230799, and the gender variable stands at 1.021524. Moreover, the overall VIF value of the variable is below 10 which indicates that there is no multicollinearity problem; thus, the regression model is good.
2. Heteroscedasticity test

Table 5. Results of Heteroscedasticity Test

<table>
<thead>
<tr>
<th></th>
<th>Statistic</th>
<th>d.f.</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>F-statistic</td>
<td>7.896694</td>
<td></td>
<td>0.0000</td>
</tr>
<tr>
<td>Obs*R-squared</td>
<td>32.54301</td>
<td></td>
<td>0.0000</td>
</tr>
<tr>
<td>Scaled explained SS</td>
<td>61.89597</td>
<td></td>
<td>0.0000</td>
</tr>
</tbody>
</table>

Table 5. shows the results of the heteroscedasticity test by using the Glejser method. The results show that the probability value of each independent variable is less than 0.05. This means that all variables are not independent of the residual value, so it can be concluded that there is heteroscedasticity in the data.

4.4. Selection of Model

To select the appropriate regression model, the panel data regression model must be tested first. Testing the regression model produces a random effect model, a common effect model, and a fixed effect model. Next, the Chow test was carried out to determine the appropriate model between the common effect model, the random effect model, and the fixed effect model.

1. Chow Test

The Chow test is used to determine the appropriate model between the common effect model and the fixed effect model. From the results of the heteroscedasticity test in Table 4.4, the probability value of the chi-square cross section is 0.0000, which is less than 0.05, so it can be concluded that the more appropriate model is the fixed effect model. Next, the Hausman test is conducted to determine whether the fixed effect model is more appropriate than the random effect model.

Table 6. Results of the Chow Test

<table>
<thead>
<tr>
<th></th>
<th>Statistic</th>
<th>d.f.</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-section F</td>
<td>2.483049</td>
<td>(52.95)</td>
<td>0.0001</td>
</tr>
<tr>
<td>Cross-section Chi-square</td>
<td>134.752827</td>
<td>52</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

Source: Results of eviews data processing

2. Hausman Test

Table 7. Results of the Hausman Test

<table>
<thead>
<tr>
<th></th>
<th>Chi-Sq. Statistic Chi-Sq.</th>
<th>d.f.</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-section random</td>
<td>19.844182</td>
<td>9</td>
<td>0.0189</td>
</tr>
</tbody>
</table>

Source: Results of eviews data processing
The results of the Hausman test show that the probability of a cross-section random is 0.0189 or less than 0.05; thus, it can be concluded that the more appropriate regression model for this study is the fixed effect model.

### Table 8 Results of Fixed Effect Regression Model

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>1.120793</td>
<td>0.248829</td>
<td>4.504262</td>
<td>0.0000</td>
</tr>
<tr>
<td>ROA</td>
<td>7.680493</td>
<td>2.160057</td>
<td>3.555690</td>
<td>0.0006</td>
</tr>
<tr>
<td>CR</td>
<td>0.013116</td>
<td>0.024266</td>
<td>0.540496</td>
<td>0.5901</td>
</tr>
<tr>
<td>DAR</td>
<td>0.015053</td>
<td>0.177019</td>
<td>0.085037</td>
<td>0.9324</td>
</tr>
<tr>
<td>ACT</td>
<td>-0.115854</td>
<td>0.183483</td>
<td>-0.631415</td>
<td>0.5293</td>
</tr>
<tr>
<td>GEN</td>
<td>2.252576</td>
<td>1.730869</td>
<td>1.301414</td>
<td>0.1963</td>
</tr>
<tr>
<td>ROA*GEN</td>
<td>-57.94411</td>
<td>16.95881</td>
<td>-3.416756</td>
<td>0.0009</td>
</tr>
<tr>
<td>DAR*GEN</td>
<td>-0.445669</td>
<td>0.643987</td>
<td>-0.692046</td>
<td>0.4906</td>
</tr>
<tr>
<td>CR*GEN</td>
<td>-0.204846</td>
<td>0.416534</td>
<td>-0.491788</td>
<td>0.6240</td>
</tr>
<tr>
<td>ACT*GEN</td>
<td>4.213468</td>
<td>1.917315</td>
<td>2.197588</td>
<td>0.0304</td>
</tr>
</tbody>
</table>

Source: Results of eviews data processing

Based on the results of the regression test in Table 8, the following equation is obtained:

$$\text{TOBINSQ} = 1.120793 + 7.680493 \text{ ROA} + 0.013116 \text{ CR} + 0.015053 \text{ DAR} - 0.015053 \text{ ACT} - 57.94411 \text{ ROA*GEN} -0.445669 \text{ DAR*GEN} -0.204846 \text{ CR*GEN} + 4.213468 \text{ ACT*GEN}$$

### 4.5 Multiple Linear Regression Analysis

The test results in the previous sections can determine the effects of financial ratios on firm value with gender diversity as the moderating variable, and based on the results of panel data regression estimate, the following results are obtained:

#### 4.5.1. Coefficient of Determination Test ($R^2$)

The coefficient of determination test is used to see the extent of the independent variables' ability to explain the dependent variable. Table 9 shows the results of testing the coefficient of determination in this study.

### Table 9 Results of R-Squared Test

<table>
<thead>
<tr>
<th>Root MSE</th>
<th>0.610386</th>
<th>R-squared</th>
<th>0.706722</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean dependent var</td>
<td>1.601233</td>
<td>Adjusted R-squared</td>
<td>0.518407</td>
</tr>
<tr>
<td>S.D. dependent var</td>
<td>1.130713</td>
<td>S.E. of regression</td>
<td>0.784680</td>
</tr>
<tr>
<td>Akaike info criterion</td>
<td>2.640359</td>
<td>Sum squared resid</td>
<td>58.49370</td>
</tr>
<tr>
<td>Schwarz criterion</td>
<td>3.847284</td>
<td>Log likelihood</td>
<td>-145.2682</td>
</tr>
<tr>
<td>Hannan-Quinn criter.</td>
<td>3.130534</td>
<td>F-statistic</td>
<td>3.752864</td>
</tr>
<tr>
<td>Durbin-Watson stat</td>
<td>2.575381</td>
<td>Prob(F-statistic)</td>
<td>0.000000</td>
</tr>
</tbody>
</table>

Source: Results of eviews data processing
From Table 8, the adjusted R-squared value stands at 0.10707 or 52%. This means that 52% of the firm value variables can be explained by the ROA, CR, DAR, Activity Ratio, and gender diversity variables as moderating variables. The remaining 48% is explained by other factors outside the research model.

4.5.2. Significance Test (F-Test)

The F-test is used to see whether the effects of the independent variables jointly affect the dependent variable by looking at the significant value of F. The results of the F-test can be seen in Table 10.

<table>
<thead>
<tr>
<th>Table 10. Results of F-Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Root MSE</td>
</tr>
<tr>
<td>Mean dependent var</td>
</tr>
<tr>
<td>S.D. dependent var</td>
</tr>
<tr>
<td>Akaike info criterion</td>
</tr>
<tr>
<td>Schwarz criterion</td>
</tr>
<tr>
<td>Hannan-Quinn criter.</td>
</tr>
<tr>
<td>Durbin-Watson stat</td>
</tr>
</tbody>
</table>

Source: Results of eviews data processing

From Table 10, the F-count is 3.752864 with a significance value of 0.000 which is < 0.05. Therefore, it can be concluded that the estimated regression model is suitable for use in further analysis, or the hypotheses can be accepted.

4.5.3 Regression Coefficient Test (t-test)

The t-test is needed to find out whether the independent variables partially have significant effects on the dependent variable. The results of the t-test can be seen in Table 4.7 (also showing the results of fixed effect regression model). Table 4.7 indicates that only ROA, ROA*GEN, and ACT*GEN have a significant effect on the value of the firm. Each has a significance level of 0.0006, 0.0009, and 0.0304 respectively, which are smaller than 0.05. Thus, there are three conclusions that can be drawn. First, the hypothesis stating that ROA has an influence on the value of the firm value is accepted. Second, the hypothesis that gender diversity strengthens the effect of ROA on the value of the firm is accepted. Third, the hypothesis which states that gender diversity strengthens the effect of the activity ratio on the value of the firm is also accepted.

4.6. Discussion

Based on the results of this study, it is found that profitability has an influence on the firm value of the companies which were registered in Kompas 100 Index and listed on IDX in 2015-2019 period. This shows that if there is an increase in ROA, it will affect the increase in the
value of the firm. ROA has a positive influence on the value of the firm value; thus, the higher the ROA value, the higher the resultant value of the firm. Companies that are successful in increasing profitability (ROA) are able to attract investors because the investors believe that companies with high profitability can generate high returns (Rudangga & Sudiarta, 2016).

The results are in line with those of Putra & Lestari (2016) with regard to the fact that profitability has a positive influence on the value of the firm. Profitability is the company's ability to earn profits while running the company's operations. The higher the company's profitability, the better the company's performance. Moreover, higher profitability is in line with the increase in the value of the firm which can also increase the company's prospects.

The results of the study also confirm that leverage proxied by the debt-to-asset ratio (DAR) has no influence on the value of the companies in Kompas 100 Index which were also listed on the IDX between 2015 and 2019. Leverage is the company's ability to settle its long-term and short-term financial obligations. Furthermore, leverage is a financial ratio that measures how much the company is financed by its debt. The higher use of debts can attract a positive signal to investors, but the higher use of debts can also mean that the company is not able to manage its finances properly.

Furthermore, the results also prove that the presence of women on the board cannot moderate the relationship between DAR and the value of the firm. This is in line with Fauziah (2018) that also confirms that women always act independently; therefore, the presence (or the absence) of women on the board of directors is not able to strengthen or weaken the relationship between leverage (DAR) and the value of the firm.

From the results of the study, it is also found that liquidity as proxied by the current ratio (CR) has no influence on the value of the companies in Kompas 100 Index listed on the IDX during the 2015-2019 period. This result is similar to that of Oktrima (2017) that also confirms that liquidity has no influence of the value of the firm. Liquidity proxied by the current ratio is a ratio to measure the company's ability to pay short-term obligations or debts that will reach its maturity soon. Current ratio also serves the ratio to measure the company’s level of security (margin of safety). If the current ratio of a company is low, it means that the company lacks the necessary capital to pay its debts. However, if the current ratio is high, it cannot be guaranteed that the company is in good condition. Basically, liquidity is the company's ability to meet its obligations, and when the amount of debt is low, it can increase the value of the company. Nevertheless, a high liquidity can also indicate that a big portion of the company funds is idle, and this can reduce the company’s profits (Gultom, Agustina, & Wijaya, 2013).

The results of the study also show that the activity ratio, which compares the company's total income and total assets, has no influence on the value of the companies in Kompas 100 Index listed on the IDX in the 2015-2019 period. Furthermore, a high activity ratio does not guarantee that the value of the company will also be high.

In addition, the results of the study also confirm that the presence of women can moderate the relationship between activity ratio and the value of the firm. In this study, the activity ratio has no influence on the value of the firm, but the presence of women is able to moderate the relationship between the two. This is due to the trait of women who tend to be better in managing money, and this is in line with the objective of the activity ratio, which is to measure the effectiveness of the company's fund management. That is why the trait of women related to
good management of money can affect the influence of the activity ratio on the value of the firm.

5 Conclusion, Limitation, And Recommendation

5.1 Conclusion

Based on the results of the study, several conclusions can be drawn which are briefly explained in the following sections.

1. This study proves that profitability as proxied by ROA has a positive influence on the value of the firm. The higher the profitability, the higher the value of the firm. Furthermore, the other three variables which are the liquidity proxied by the current ratio, the leverage variable as proxied by DAR, and the activity ratio proxied by TATO, have no influence on the value of the firm.

2. The results of this study show that gender diversity is able to strengthen the relationship between profitability (ROA) and the value of the firm. This can be explained because women are more cautious and have sharp business intuition and detailed observation skills which are useful in analyzing business impacts and risks. Furthermore, the presence of women is able to moderate the influence of the activity ratio on the value of the firm although the activity ratio in this study does not significantly affect the value of the firm. Moreover, gender diversity is not able to moderate the influence of liquidity and leverage on the value of the firm.

5.2. Limitation

This study has several limitations. First, the research was conducted only on companies in Kompas 100 index which are also listed on IDX. Second, the use of gender diversity as the moderating variable is only measured based on the number of women sitting on the boards of directors and commissioners, and their competence has not been identified. Third, there are inconsistent results in the activity ratio data processing results which show no influence on the value of the firm although the presence of women is able to moderate the two variables.

5.3. Recommendation

Based on the results of the analysis, two recommendations can be given here.

1) Companies should assign women on the board structure because women have a cautious character, so they are able to analyze business risks better. Moreover, to measure gender diversity, it is better to use not only the number of women but also other criteria such as their competence.

2) Therefore, future studies in this topic are also recommended to add indicators of women's competence, knowledge, and work experience in measuring gender diversity.
Reference


