Related Board Diversity and Firm Value

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ABSTRACT
This study aims to examine the effect of board diversity in the form of tenure, level of education and expertise on firm value. The sample in this study used property, real estate and construction companies listed on the Indonesia Stock Exchange in 2017-2021. Based on the results of purposive sampling, 210 companies were obtained that met the sample criteria. This study used quantitative methods and multiple regression analysis using secondary data in the form of annual reports and financial reports available on the Indonesia Stock Exchange. The results of hypothesis testing show that the diversity of board experience has a positive effect on firm value while the diversity of tenure and education level of the board of directors has no effect on firm value. The findings of this study can be used by companies in establishing good corporate governance to improve company performance and investor confidence.

INTRODUCTION
Companies have a strong motivation to maximize shareholder well-being through increased firm value. Such efforts are pursued in a variety of ways, one of which is to manage the company optimally. Corporate governance provides a set of mechanisms that direct and control the company so that its operations fulfill the expectations of its stakeholders. A well-conducted good governance is able to improve company performance (Bhagat & Bolton, 2008), as well as to encourage the achievement of sustained competitive advantage. Moreover, in an era where information and knowledge are advanced, companies are encouraged to be at advantage in corporate management and strategic resource selection to maximize firm value.

Fundamentally, a company is established as a separate legal entity between shareholders and managers (Hien & Hai, 2020). Shareholders will appoint a board of directors to manage the company. This management is carried out by the board of directors in order to prevent management from taking actions that may compromise shareholders and thus minimize losses and errors (Sun & Bhuiyan, 2020). The board of directors must carry out their responsibilities independently and integrally in the interests of the company. In the implementation of corporate governance, the board of directors must make decisions that maximize the welfare of shareholders. Decisions taken by the company's board of directors influence the future performance of the company (Moreno-Gómez et al., 2018). Objective and comprehensive decisions are the investor's expectation that the company's performance will continue to improve (Ramadhani & Adhariani, 2017).

According to Martinez-Jimenez et al., (2020) the composition of the board of directors affects the effectiveness in decision-making, thus potentially affects the performance of the company. The composition can be classified according to the characteristics and expertise of each board of directors, such as gender (Arena et al., 2015; Arioglu, 2020; Fathonah, 2018; Moreno-Gómez et al., 2018), education (Darmadi, 2013), expertise (Gottesman & Morey, 2006; Nekhili & Gatfaoui, 2013), and
age (Fathonah, 2018; Gottesman & Morey, 2006). If the attributes of board members are the same, then board members can quickly approve a decision (Marcel et al., 2010), but the information taken from such a decision may be minimum. Hence, diversity becomes important as it provides greater number of ideas that will enrich available alternatives to effective decision-making (Ali et al., 2020), hereby enhancing decision-making (Adeabah et al., 2019; Bhat et al., 2020). This is in line with the Upper Echelon Theory, which states that the characteristics of the board of directors affects organizational decisions.

The Upper Echelon Theory believes that decision-makers' backgrounds, such as education, expertise, age, gender, and tenure, can influence the outcome of decisions made, which can further contribute to determining firm value. Harjoto et al., (2018) revealed that group dynamics and decision-making will vary depending on the background of the individual serving in the company. Such diversity will have positively affect a company as different knowledge, experience, and perspectives can enhance the ability of the board of directors to recognize the needs and interests of stakeholders, provide an increasingly diverse alternative solution to a problem, and provide unique characteristics that can create added value (Kusumastuti et al., 2007).

Hence, this study aims to examine the influence of board diversity on the firm value. Previous research has investigated related to board diversity but highlights more on the impact of gender diversity on the firm value. Unlike previous research, the study focuses on attributes related to task-related board diversity, such as tenure, education, and expertise that the board of directors possesses, which are predicted to determine the movement of a company’s value. West & Dellana (2009) found that cognitive diversity improves group decision-making processes. Training and education make people more knowledgeable and enable them to achieve the goals of the organization (Ali et al., 2020). Whereas task-related diversity is also significant to company productivity. Various boards of directors can deploy different expertise and experience in determining the level of capital requirements, advising in the selection of the latest technology, and monitoring workforce training programs (Ali et al., 2020). Some of these decisions have influenced the change in firm value. Thus, the hypotheses formulated in this study are as follow:

H1 = tenure of the board of directors has a positive effect on firm value
H2 = education of the Board of Directors positively effect on firm value
H3 = expertise of the Board of Directors positively effect on firm value

METHOD

In this research we use explanatory quantitative, targeting the population of property, real estate, and building construction sector companies listed on the IDX. The observation period is from year 2017 to 2021, with a total of 78 companies. Using a purposive sampling method, 36 companies were excluded from the sample because they did not publish annual reports and financial reports during the research period. Based on this, the sample for this research is 42 companies with an observation period of five years, or a total of 210 samples. The dependent variable in this research is firm value, and the independent variable is task related board diversity, which consists of tenure, education, and expertise of the board of directors. The level of diversity for each of these characteristics is measured using a formula adopted from Saggar et al., (2022), namely the Blau’s index as follows:
\[ Bi = 1 - \sum_{i=1}^{k} P_i^2 \]

Description:
\( P \) = proportion of objects under a certain category
\( I \) = category
\( K \) = number of categories

To investigate the influence of tenure, education, and board of directors’ expertise on firm value, this research tested multiple regression analysis. However, in various studies problems were found such as abnormal data, heteroscedasticity and autocorrelation. Therefore, the data obtained must be tested first so that it meets the basic assumptions. This research uses normality tests, multicollinearity tests, heteroscedasticity tests, and autocorrelation tests. Based on the results of the tests that have been carried out, this research data is normally distributed, there are no symptoms of multicollinearity, no symptoms of autocorrelation, and no symptoms of heteroscedasticity. Thus, multiple linear regression can be carried out in this research. To prevent bias, this research also adds control variables such as company size, leverage, profitability in the regression equation. The regression equation that can be formulated is:

\[ \text{Tobin’s Q} = \alpha + \beta_1 \text{Tenure} + \beta_2 \text{Education} + \beta_3 \text{Expertise} + e \]

Notes: \( \alpha \) = constant; \( \beta_{1,2,3,4} \) = regression coefficient

RESULTS AND DISCUSSION

The results of descriptive statistics are shown in Table 1. It can be seen that firm value as proxied by Tobin’s Q has an average value of 1.087 or greater than 1. This means that the average share price of the sample company during the observation period is overvalued or the investment sales price is higher than the predetermined market price (Sudiyatno & Puspistasari, 2010). This also indicates that investors are willing to pay more for company assets because management is expected to perform well in the future (Janamrung & Issarawornrawanich, 2015; Jiamsagul, 2007). Table 1 also shows the average value of D_tenure is 0.31 and D_education is 0.30. This value is less than 0.5, which means that on average the sample company has a board of directors with relatively low tenure and education or is less diverse. D_expertise has an average value of 0.52 or more than 0.5, which means that on average the sample companies have boards of directors that are more diverse in terms of expertise.
Table 1. Descriptive Statistics

<table>
<thead>
<tr>
<th>Variabel</th>
<th>N</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firm Value</td>
<td>210</td>
<td>0.092</td>
<td>16.431</td>
<td>1.087</td>
<td>1.470</td>
</tr>
<tr>
<td>D_Tenure</td>
<td>210</td>
<td>0.000</td>
<td>0.750</td>
<td>0.313</td>
<td>0.239</td>
</tr>
<tr>
<td>D_Education</td>
<td>210</td>
<td>0.000</td>
<td>1.000</td>
<td>0.303</td>
<td>0.227</td>
</tr>
<tr>
<td>D_Expertise</td>
<td>210</td>
<td>0.000</td>
<td>1.000</td>
<td>0.520</td>
<td>0.152</td>
</tr>
<tr>
<td>Firm Age</td>
<td>210</td>
<td>3.000</td>
<td>49.000</td>
<td>29.905</td>
<td>10.646</td>
</tr>
<tr>
<td>profitability</td>
<td>210</td>
<td>-14.137</td>
<td>39.978</td>
<td>0.230</td>
<td>3.032</td>
</tr>
<tr>
<td>Leverage</td>
<td>210</td>
<td>-21.058</td>
<td>4.115</td>
<td>0.611</td>
<td>1.836</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>210</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: data processing, 2023

Table 2 shows the results of regression analysis testing. The coefficient of determination (R²) value for model I shows that D_tenure, D_education, and D_expertise can explain variations in firm value of 7.9%. In model II, by adding control variables (firm age, profitability, and leverage), the R² value of the sample companies shows an increase to 17.2%. This implies that the presence of control variables in this study increases the fit of the model in the interaction between the dependent and independent variables.

Table 2. Results of Regression Analysis

<table>
<thead>
<tr>
<th>Variables</th>
<th>Model I</th>
<th>Model II</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>β</td>
<td>t-stat</td>
</tr>
<tr>
<td>Constant</td>
<td>0.068</td>
<td>0.731</td>
</tr>
<tr>
<td>D_Tenure</td>
<td>-0.482</td>
<td>-2.060</td>
</tr>
<tr>
<td>D_Education</td>
<td>-0.029</td>
<td>-0.131</td>
</tr>
<tr>
<td>D_Expertise</td>
<td>0.872</td>
<td>2.703</td>
</tr>
<tr>
<td>Firm Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Profitability</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leverage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>3.740</td>
<td>0.014</td>
</tr>
<tr>
<td>R²</td>
<td>0.079</td>
<td></td>
</tr>
</tbody>
</table>

Source: data processing, 2023

The test results in Model I show that D_tenure and D_expertise influence firm value, hereby, means that increasingly diverse terms of office can reduce the value of the company, which is indicated by the regression coefficient for the tenure variable having a negative direction. Meanwhile, other results show that increasingly diverse expertise can increase the value of sample companies. Different results were found in Model II by adding control variables (firm age, profitability, and leverage) which showed that the diversity of work experience and expertise possessed by members of the board of directors had no effect on firm value. This means that the presence of control variables in this study reduces the influence of D_tenure and D_expertise on firm value. Furthermore, the test results in Model I and Model II show that the educational background of the board of directors has no effect on firm value. This means that the more diverse the educational background of the board of directors neither increases nor decreases the firm value of the sample companies.

The Effect of Tenure Diversity on Firm Value

Tenure is defined as the duration of a member of a board of directors has been employed in an organization. Boards of directors with a long tenure are considered to have better experience regarding organizational systems, organizational culture and
how to access organizational resources for team performance (Bell et al., 2011; Putri, 2020). Therefore, the longer the board of directors serves, the stronger its influence on board members in determining company policies to reduce risk. A board of directors that serves for a longer term can result in inflexibility in the company in which unavoidable conditions causing the company in needs of a board of directors with new and broad thinking in order to create better firm value (Ye, 2016). Hence, a combination of board of directors’ tenure is expected to help maximize firm value, where old directors can take advantage of their experience to better understand the company's specific problems and available resources, while young and energetic directors bring new perspectives and knowledge to discuss with other decision makers.

According to Magnanelli et al. (2021); Hamidlal & Harymawan (2021); dan Ye (2016) found that the more diverse the tenure of the board of directors in a company, the greater the corporate value of a company. However, based on data and statistical test results, the findings of this study are the identical with Muliawan et al. (2022) which found that diversity in tenure has a negative effect on firm value. This indicates that the higher the level of diversity in board of directors' tenure will reduce the firm value of the sample companies. This happens because board of directors with a long tenure tend to avoid risks, while board of directors with a new tenure prefer to express new ideas to show that they can be trusted to lead the company. Such diversity in terms of service for the board of directors gives a negative impression of complexity in decision making. This is most likely because directors with non-homogeneous terms of service will find it difficult to coordinate to determine company policies. Apart from that, Hafsi & Turgut (2013) stated that the board of directors who had just served as directors lacked the confidence to convey their opinions to the old board of directors who were considered to have experience and better understanding in business-related decision making. Consequently, this condition causes the board of directors who have just ruled the office to be reluctant to create controversy in the decision-making process and tend to follow the opinion of the board of directors who have served longer. Meanwhile, this group of board of directors usually has a conventional view and cannot keep up with the demands of continuously developing technology, so they are unable to increase the value of the company.

**The Effect of Education Diversity on Firm Value**

The level of education is important because it has the capacity to shape individual values and cognitive abilities of a board of directors as decision makers. The academic background of the board of directors will demonstrate that an individual has good knowledge and a mature way of thinking. Hambrick & Mason (1984) explained that board of directors with a high level of education are better able to process information, have an open mind and accept significant changes in the company, whereas superior managerial skills are not always obtained from higher educational qualifications (Darmadi, 2013). This creates confusion regarding how education level affects firm value.

The importance of a director's level of education is assessed not because of the high level of degree obtained but rather the maturity of the way of thinking in dealing with problems or determining company policies. Differences in education levels will influence differences in thought patterns. The way of thinking at the undergraduate level is usually rather systematic, while at the master's level the mindset is more strategic and at the doctoral level it is more philosophy-oriented where
someone can influence the decision-making process (Santrock, 1995). Boards of directors with heterogeneous levels of education have different paradigms and cognitive perspectives in influencing the decision-making process. Upper Echelons Theory also implies that diversity in the education level of the board of directors as top management can increase firm value because this diversity can provide more appropriate and constructive input or advice to board members.

These findings are not in line with Ikhyanuddin (2021); Yogiswari & Badera (2019); and Pramesti & Nita (2022) which states that the education level of the board of directors has a positive effect on firm value. Where, in this research, the board of directors is said to be an important person in an organization as it holds the mandate to make decisions that will affect the company's performance. Therefore, one of the characteristics of the board of directors, namely the level of education, is considered to play a pivotal role in helping the organization achieve a more satisfactory firm value. However, this study supports the findings of Magnanelli et al. (2021); Bangun & Ridaryanto (2021); and Kusumastuti et al. (2007) which proves that diversity in directors' educational levels has no effect on firm value. Hence, to increase the value of the company, having a board of directors with varying levels of education is not necessarily needed, and rather to have one with knowledge and abilities appropriate to the respective type of business and position held. This is consistent with Darmadi (2013) statement that increasing firm value needs to be supported by a board of directors who have a high level of education. However, in this research, the level of education is measured by the diversity of educational backgrounds, not based on educational level.

The Effect of Expertise Diversity on Firm Value

Directors are one of the keys to the company's success in making decisions, strategic planning and developing business innovation, so that their expertise in managing a business will affect the company's progress. Apart from that, it is also mandatory for a board of directors to have credibility, skills and experience in order to provide independent judgment on issues of strategy, performance and company resources. It is not merely technical skills (hard skills) but also skills to manage oneself and others (soft skills) that are needed (Kusumastuti et al., 2007). When the board of directors is able to manage the business, stakeholders will perceive the company will develop, assets can be managed and investment will increase, so that the value of the company will also increase (Mulyati et al., 2021). Therefore, it is important for an organization to pay attention to the experience and expertise of company leaders.

There are different opinions from various previous researchers regarding how diversity of experience can influence firm value. On the one hand, directors who have experience from various companies and different industries can make decisions that benefit the company, because the wealth of experience of a board of directors will show its ability to help the company in obtaining and providing information. The diversity of experience possessed by the board of directors will create a synergy that complements the weaknesses in the board of directors' knowledge and results in supervision of company management activities that is more thorough, and full of consideration. On the other hand, these differences in experience can reduce effective communication and coordination and prevent the board of directors from reaching agreement on strategic issues. Relevant to the research results of Ye (2016) dan Tejerina-Gaite & Fernandez-temparo (2020), the findings of this research prove that the diversity of experience of the board of directors in various fields such as Financial,
Consulting, Legal, Management/executives and Research, Technology and Medical has a positive effect on the value of the company. This means that the more diverse the experience the board of directors has, the more the firm value will increase and vice versa. These findings support the view of Upper Echelons Theory where, the diversity of directors' attributes such as expertise and experience will produce diverse views and provide various considerations that will benefit the implementation of strategies such as diversification and help increase firm value, so that these differences can be utilized properly).

**CONCLUSION**

The purpose of this research is to examine the influence of board's diversity, such as length of service, level of education and expertise of the board of directors, on firm value in property, real estate and construction companies listed on the Indonesia Stock Exchange from 2017 to 2021. Based on the results of research that has been conducted, the results show that hypothesis 1, namely the tenure of the board of directors, has a negative effect on the value of the company and hypothesis 2, namely the education level of the board of directors, has no effect on the value of the company, while hypothesis 3, namely that expertise or experience has a positive effect on the value of the company. All in all, to increase the value of a company, diversity in the expertise/experience of the board of directors is needed because the higher the level of diversity of expertise/experience of the board of directors, the higher the value of the company is. However, other variables such as diversity of tenure and education level of the board of directors are not needed in efforts to increase firm value. The findings of this research can provide important implications for companies in the reformation of a board of directors. A corporate governance structure including a board of directors certainly consists of various individuals with diverse backgrounds and features, thus it is hoped that a company can make the best use of these differences to help increase firm value.

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**Reference**


