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Board Diversity and Government Link Company Performance: the Case of Emerning Country

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ABSTRACT

The importance of board diversity to improve company performance has been documented by previous researhers. However, prior research failed to emphasise government link company. Therefore, this paper investigates the effect board diversity on performance of government link company in Indonesia. We use the supervisory board diversity since we have two tier Board in Indonesia corporate governance system. In addition, Board Diversity composed of four: tenure, age educational and gender diversity. The data is collected from the annual report and financial statement of the company. This kind of data was taken from Indonesia's stock exchange website, company sites and other electronic sources. Board diversity is measured by Blau Index and firm performance is measured by four proxies: accounting performance (ROA and ROE), and market performance (Stock return and Tobin's Q). The multiple regression analysis is applied to analyze the data. this study reveals that there is no effect of the board diversity on performance of government link company except board gender diversity for Tobin's Q model. In addition, one control variable (company leverage) consistently for all models has a significant effect on company performance. This study has practical and theoretical implications, and it has been discussed in the paper. We suggest to the future investigator to add the research samples and consider other board diversity as factors affecting performance.

Keywords: *Board Diversity, Company, Performance*

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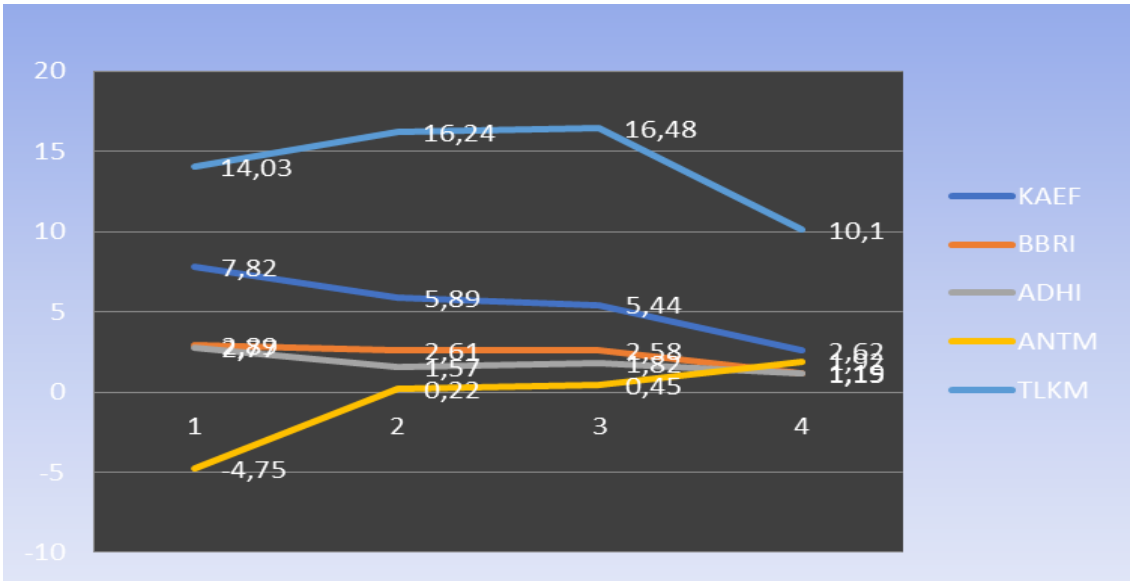
INTRODUCTION

State-Owned Enterprises (BUMN) are faced with various problems, such as the reshuffle of the board of directors of State-Owned Enterprises (BUMN) by BUMN minister Erick Thohir (Yu dkk., 2021). These changes will have an impact on stock prices, company performance and growth. Many of the recent corporate governance reforms have focused on company board members, the changes that have occurred require various parties to contribute more in all their efforts to achieve the desired progress, especially for companies that in today's modern era have free and tight competition (He dkk., 2020). PT Krakatau Steel Tbk is currently in a difficult condition. Various problems plagued the state-owned company steel company (Ai dkk., 2020). For 7 consecutive years it has recorded losses since 2012 (Mariotti & Marzano, 2019). Krakatau Steel's financial performance in 2018 experienced a loss of Rp. 1.07 trillion or valued at $ 77 million the same as the previous year. Krakatau Steel's underperformance is due to demand problems. In addition, imported products also put pressure on the company's performance (Ruan & Liu, 2021). The following is the average company performance based on calculations using ROA (Return on Assets) taken from 5 state-owned companies listed on the IDX in 2015-2018 which can be seen in the image below:



Company performance

According to Byars, (1984) performance is an evaluation of the activities of a company during the observation period in order to achieve the target of a company. Organizational performance according to Sobandi, (2006) is an evaluation of organizational activities during a certain period, input, output, outcome, benefit, and impact (Manes-Rossi dkk., 2020). Organizational performance is needed to understand and improve the optimal achievement of organizational goals and objectives. According to Yus, (2017) company performance is the level of achievement of results for the implementation of tasks and the level of obtaining results in realizing company goals (Davis dkk., 2019). Resource Dependence Theory emphasizes how resources are

accessed and obtained. Resource Dependence Theory views boards as an important information and resource tool for companies.

Age Diversity

The age diversity indicates that the board has a mix of directors of different ages. The company board is made up of middle and senior age directors, and middle age boards will benefit from the extensive experience of the senior members. Senior members often have strong networks and influence that companies can leverage (X. Wang dkk., 2021). Younger people are perceived as more flexible, more appreciative of new concepts and technologies, and more willing to take risks (B. Beribe, 2023). The age diversity indicates that the board has a mix of directors of different ages. According to Jindal & Jaiswall, (2015), with the varying ages of the board of directors, it can improve company performance (Loh & Agyeman, 2019). Due to the age difference between boards of directors, they will be able to better relate to different stakeholders from different age groups. Senior members of the board of directors may be more likely to deal with government authorities or regulators. Young directors can align with the aspirations of the next generation (P. Wang dkk., 2020). Boards of different age groups will have different perspectives and skills that will help create a balanced board. It is important that one age group does not dominate the board of directors, because if you are dominant in old age, you will face health problems and result in decreased intellectual abilities and company performance Darmadi, (2011) (Hu dkk., 2021), younger members must participate independently and not be intimidated by colleagues their seniors. Meanwhile, the results of research by Kagzi & Guha, (2017) show that age diversity has a positive effect on company performance.

H1a: Age diversity affects company performance as measured by ROA
H1b: Age diversity affects company performance as measured by ROE
H1c: Age diversity affects company performance as measured by ROI
H1d: Age diversity affects company performance as measured by TQ

Gender Diversity

High gender diversity in board positions is common in small family companies. most opportunities for women to occupy corporate board positions are due to family ties or controlling shareholder. because of that, large companies are thought to be getting harder for women to reach company board positions (Zhang dkk., 2019). Having women on the board of directors can help make a decision, because women have a high prudent behavior, avoid risks, are more thorough and are not in a hurry in making decisions than men (Selviani, 2018). According to Lückerath-Rovers, (2013) the higher the diversity of female directors, the lower the company's performance. Due to the high gender diversity in the board members manifest diverse opinions and critical thinking, decision making is time consuming and less effective. Women have more negative thoughts and have low self-esteem, therefore women pose a lot of risky situations in the company (Jiang dkk., 2021). Meanwhile, the greater the diversity of female directors, the higher the company's performance. This is due to the development of creativity and innovation due to the increasing number of different individuals and personalities on the

company board. Meanwhile , according to Kristina & Wiratmaja, (2018) companies with high female board diversity do not always produce better company performance because gender diversity in board positions may be easier to explain from a sociological perspective than an economic perspective.

H2a: Gender diversity affects company performance as measured by ROA
H2b: Gender diversity affects company performance as measured by ROE
H2c: Gender diversity affects company performance as measured by ROI
H2d: Gender diversity affects company performance as measured by ROI

Education diversity

Diversity educational background is people who have different educational backgrounds (S. Xu & Liu, 2020). Diversity educational background boards is one aspect that affects its performance in- company activities (Kartikaningdyah & Putri, 2017). Board education in companies should be able to expand the knowledge, skills and abilities in company problem solving (J. Xu & Li, 2022). Diversity of educational backgrounds will support companies to get the best decisions compared to educational backgrounds that are not diverse (Li dkk., 2022). This is due to the company's need for a certain educational background and experience that changes over time (Midavaine et al., 2016). According to Darmadi, (2011) the less diversity of education of directors, the higher the company's performance (Adhikari dkk., 2020). Because a board member is able to build on the value of his / her knowledge and should monitor the expertise and knowledge of board members. In contrast to the opinion of Li, Maggitti, Smith, Tesluk, & Katila, (2013) which states that the more diversity of educational backgrounds, the lower the company's performance (Wen dkk., 2019). Caused will stimulate the collection and processing of information, and will cause conflicts and differences of opinion between members of the board of directors (Jia dkk., 2019). According to Ponnu, (2008) BOD should consist of professionals with expertise in tax, accounting, finance and others. Having board members with expertise can provide useful perspectives on risk assessment, competitive advantage and understanding of the challenges faced in business.

H3a: Education diversity affects company performance as measured by ROA
H3b: Education diversity affects company performance as measured by ROE
H3c: Education diversity affects company performance as measured by ROI
H3d: Education diversity affects company performance as measured by TQ

Tenure Diversity

Diversity of the tenure of the board of directors is showing the variety of lengths a member of the board of directors has worked for a company. Directors who have long-term tenure are associated with greater experience (Carpenter dkk., 2021), commitment and competence, because directors have important knowledge of the company and the business environment The higher the diversity tenure of the board of directors, the higher the company's performance (Parente dkk., 2019). Because the tenure of senior and junior members of the board of directors hold equal positions, the more the board of directors will know about the company, so they will better understand the running of the

company and be able to work better and efficiently. According to Kartikaningdyah & Putri, (2017) the higher the diversity of the tenure of the board of directors, the lower the company's performance (Pan dkk., 2021). Due to the varying tenure of the board of directors, there can be conflicts of opinion between the old board of directors and the new board of directors. Based on previous research, juniro and senior board members have a balanced position in the level of company performance.

H4a: Diversity tenure affects company performance as measured by ROA
H4b: Diversity tenure affects company performance as measured by ROE
H4c: Diversity tenure affects company performance as measured by ROI
H4d: Diversity tenure affects company performance as measured by TQ

RESEARCH METHODOLOGY

Government link companies from 2016 to 2018 that are listed on the Indonesia Stock Exchange are used as objects in this research, especially BUMN. A total of 22 companies were sampled (Wright dkk., 2021). Secondary data is a type of data used in research. Data is obtained from financial reports and summary reports of company performance listed on the IDX in 2016-2018. The dependent variable was measured by ROA, ROE, ROI and Tobin's Q (Fan dkk., 2020). While board diversity was measured using Blau's Index (Midavaine et al., 2016). The research model uses a multiple linear regression model and a mathematical model can be seen below:

$$ROA = \alpha + \beta_1 DUDD + \beta_2 DGDD + \beta_3 DLBPDD + \beta_4 DMJDD + \beta_5 Size + \beta_6 Lev + \beta_7 UP + e \quad (1)$$
$$ROE = \alpha + \beta_1 DUDD + \beta_2 DGDD + \beta_3 DLBPDD + \beta_4 DMJDD + \beta_5 Size + \beta_6 Lev + \beta_7 UP + e \quad (2)$$
$$ROI = \alpha + \beta_1 DUDD + \beta_2 DGDD + \beta_3 DLBPDD + \beta_4 DMJDD + \beta_5 Size + \beta_6 Lev + \beta_7 UP + e \quad (3)$$
$$TQ = \alpha + \beta_1 DUDD + \beta_2 DGDD + \beta_3 DLBPDD + \beta_4 DMJDD + \beta_5 Size + \beta_6 Lev + \beta_7 UP + e \quad (4)$$

The research data were analyzed using multiple linear regression method. The analysis begins with a statistical description using the mean, minimum, maximum and standard deviation analysis tools (Gujarati, 1995). Before testing the hypothesis, the research model must be free from classical assumptions, namely normality, autocorrelation, multicollinearity and heteroscedasticity (Lian dkk., 2022). Hypothesis testing uses a statistical t test tool or a significance value where the significance value has a 5% limit value (Hair, William, Babin, & Anderson, 2014). However, before interpreting the t statistical value, it is necessary to look at the R2 value and the F statistical value.

RESULT AND DISCUSSION

Table 1 provides descriptive statistics of research variables, namely company performance (Y), board diversity (X1), company age, size, leverage, which are described in table 1.

Tabel 1
Outlier test and descriptive statistics of research variables

Variabel	outlier	% outlier	Min	Max	Mean	SD
Bium	1	1,51	0	0,75	0,55	0,17
Bigen	1	1,51	0	0,49	0,1	0,14

BiLPD	0	0	0	0,66	0,32	0,18
BiMJD	0	0	0	0,67	0,24	0,22
ROA	2	3,03	-4,59	17,78	3,23	4,56
ROE	1	1,51	-13,64	32,95	8,67	9,03
ROI	1	1,51	-5,16	16,48	3,22	4,74
TQ	3	4,55	0,7	8,18	1,67	1,48
Size	0	0	1.381.633	1.296.898	183.734	338.705
Lev	0	0	0,29	0,91	0,62	0,17
Um	0	0	13	123	53,36	27,68

Sources: graphad outlier test and SPSS output.

The normality test is part of the classic assumption test, the purpose of this test is to see the data used is normally distributed or not, if it is not normal then there are several ways to make the data normally distributed, for example transforming data to Ln, Sqrt and so on (X. Wang dkk., 2019). Researchers used the Kolmogrov-Smirnov multivariate analysis as follows:

Tabel 2
Normality test

Model	Unstardised residual	Cut off	Decision	Post transformation	Decision
ROA	0,322	> 0,05	Normal	-	
ROE	0,922	> 0,05	Normal	-	
ROI	0,087	> 0,05	Normal	-	
TQ	0,004	> 0,05	Not Normal	0,052	Normal

Sources: SPSS output

After conducting the descriptive test the researcher carried out the Outlier test with the aim of anticipating abnormal data, after the classical assumption test was fulfilled, it could be concluded that all data was feasible or reasonable. This study used the Kolmogrov-Smirnov One-sample using the multivariate method because previously it was done with the unvariate method but the data were not nomally distributed. Furthermore, autocorrelation, in tables 3, 4, 5 and 6, the results of the analysis show du ≤ d ≤ 4-du that the value of D is between the values of DU and 4 –Du. Then these results can be stated that the regression model does not experience autocorrelation. Then the multicollinearity test for all variables in this study was seen from the VIF value <10, so there was no multicolimearity and heteroscedasticity test for absolute residual value> 0.05, so there was no heteroscedasticity.

After granting the classic assumptions test, the hypothesis is proven through 4 research models. The first model is discussed first, the research made shows the high independent influence on the dependent based on the R2 number obtained 56.2%, which means that the independent variable can only describe clearly the dependent variable as high as 56.2, then it is clarified by other variables, and also contains three control variables, namely size.ncompany age and leverage. The assumption is proven by looking at the t-sig value of diversity age, gender, education and tenure> 0.05 so that this indicates that the hypothesis is rejected which is measured using ROA. The second model is seen from the R2 value obtained 44.5%, which means that the independent

variable can only describe clearly the dependent variable as high as 44.5, then this is clarified by other variables. The assumption is proven by looking at the t-sig value of diversity age, gender, education and tenure> 0.05 so that this indicates that the hypothesis is rejected which is measured using ROE.

The third model is seen from the R2 value obtained by 54.4% which means that the independent variable can only describe clearly the dependent variable as high as 54.4, then this is clarified by other variables. The assumption is proven by looking at the t-sig value of diversity age, gender, education and tenure> 0.05 so that this indicates that the hypothesis is rejected which is measured using ROI. While the fourth model obtained an R2 value of 60.3%, meaning that the independent variable can explain the dependent variable by 60.3%, the rest is explained by variables other than these variables, in this study also includes three control variables, besides that the hypothesis is seen in the t-sig diversity value. age, education and tenure> 0.05 means that the hypothesis is rejected as measured using TQ. While the t-sig value for gender diversity is 0.017 <0.05, this means that gender diversity affects the performance of companies with political connections as measured using Tobins Q.

Tabel 3
Regression Result

Variabel	Model ROA			Model ROE			Model ROI			Model Tobin Q		
	coef	VIF	Sig	coef	VIF	Sig	coef	VIF	Sig	coef	VIF	Sig
Bium	-4,92	1,14	0,11	-8,98	1,12	0,21	-5,32	1,14	0,11	-0,26	1,14	0,45
Bigen	1,05	1,28	0,78	4,14	1,28	0,65	-1,04	1,28	0,8	1,12	1,28	0,02**
BiLPD	3,81	1,12	0,22	8,3	1,12	0,26	3,03	1,12	0,36	0,09	1,12	0,8
BiMJD	2,999	1,09	0,26	9,562	1,09	0,13	3,01	1,09	0,29	0,27	1,09	0,37
UP	0,00	1,42	0,78	0,00	1,42	0,75	0,00	1,42	0,99	0,00	1,42	0,77
Lev	-27,55	1,29	0,00***	-45,99	1,29	0.003***	-28,2	1,29	0,00***	-3,09	1,29	0,00 ***
Um	-0,01	1,23	0,82	-0,03	1,23	0,74	0,02	1,23	0,64	0,00	1,23	0.50
F stat		4,80			3,12			4,41			5,53	
F sig		0,00			0,00			0,00			0,00	
R square		0,56			0,45			0,54			0,6	
Durbin watson	1,841≤ 1,90 ≤ 2,16			1,84 ≤ 1,91 ≤ 2,16			1,84≤ 1,98≤ 2,16			1,84≤ 1,96 ≤ 2,16		
White test		0,03			0,12			0,02			0,69	

Note: *, ** and *** indicate significant at 10%, 5% and 1%.

CONCLUSION

Based on the discussion of the results of the analysis above, it is concluded that: (i) The first hypothesis is rejected for the four models, it shows that age diversity does not affect the performance of companies with political connections, (ii) The second hypothesis is accepted for the Tobin's Q model, where the results show gender diversity affects The performance of companies with political connections, (iii) The third hypothesis is rejected for the four models, where the results show that diversity of educational background has no effect on the performance of company political

connections, and (iv) The fourth hypothesis is rejected for the four models, where the results show diversity of tenure does not influence on the performance of company political connections. For the control variable, leverage is significantly positive on the firm's political connection performance for the four models. While the control variable size and company age are not significant to the company performance with political connections. In practice, these results can be used for investors to select companies that have high performance by looking at the gender diversity of the board of directors. This study has several weaknesses including the number of samples and the variables used. For that, the next research can expand the research sample to other industries or sectors. In addition, subsequent research can also look at the company's performance from other aspects, such as ownership and external monitoring mechanisms.

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