



Board size and firm performance of listed companies in Indonesia

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Abstract

The purpose of this research is to investigate the influence of board size on the financial performance of firms listed on the Indonesian Stock Exchange from 2014 to 2018. The research method uses multiple linear regression. The firm performance is measured with return on assets (ROA). The research result shows that board size does not significantly influence the firm performance. Therefore, it is implied that board size of listed firms in Indonesia is not proven either to improve or worsen the firm performance. This research is particularly important to the firms and their shareholders in Indonesia and other developing economies since it contributes to a better understanding of board size – firm performance relationship.

Keywords: Board of commissioners; board of directors; return on assets

INTRODUCTION

A good and competent management and supervision are crucial for companies in achieving their goals. Both board of directors and board of commissioners should cooperate intensively so that the goal achievements can be guaranteed.

Nevertheless, the work of directors and commissioners occasionally is not performed as expected. It is presumed that the board size may improve or hinder the companies' goal achievements. Therefore, the researchers are interested to investigate the influence of board size on firm performance, particularly of listed companies in Indonesia.

The objective of this research is to investigate the influence of board size on firm performance in Indonesia. The organization of this paper is structured as follows. Section 2 presents the literature review on board of directors and commissioners in Indonesia and the relationship between board size and firm performance. Section 3 describes the research method. Section 4 presents the discussion of the findings, and Section 5 concludes.

Literature review

Indonesia adopts the two-tier board structure, comprised of the board of commissioners (BoC) and board of directors (BoD). The two-tier board structure is common in civil law countries (e.g. Netherlands, Germany, and many countries in Eastern Europe) whereas Anglo-Saxon countries (e.g. the United States, United Kingdom, and Australia) adopt the one-tier or unitary board structure (International Finance Corporation, 2018).

The responsibility of BoC is to oversee and advise the BoD in order to ensure that the latter pursues the interest and objectives of the company. According to the Indonesia's code of corporate governance, the responsibilities of a BoC must be performed with integrity, and it has to ensure the compliance of the company's activities with legal requirements. The role of BoC in two-tier board structure is similar to that of non-executive directors in one-tier structure (International Finance Corporation, 2018).

On the other hand, the responsibility on day-to-day management at companies in Indonesia lies on the hand of the BoD. The general meeting of shareholders is also set up by the BoD every year (International Finance Corporation, 2018).

Indonesia's Code of Corporate Governance (2006) determines that both BoC and BoD have mutual responsibility that shall be reflected in:

Internal control and risk management implemented effectively and efficiently;

Return for shareholders achieved optimally;

Interest of stakeholders protected properly;

Sustainability of organisation management ensured through succession conducted fairly and properly.

In addition, the Code also recommends that both BoC and BoD shall reach an agreement on:

A long term and annual plan, strategy, and budget;

The policy required to ensure that laws and regulations and articles of association are being adhered to and conflict of interests is avoided.

Performance evaluation policy and method for the company, its units and personnel;

A structure of organization one level under the BoD at most, so the vision, mission, and values of the company can be supported for achievement.

Most studies on the relationship between board size and firm performance conclude a negative impact from the former on the latter. Jensen (1993) and Lipton and Lorsch (1992) opposed the idea of large board because it is less effective and makes CEO control the board easier. Guest (2009) found that board size negatively impacted profitability, Tobin's Q, and share return of companies in the United Kingdom. This was caused by poor communication and decision-making normally occurred in large boards. Similarly in the context of India, board size is inversely associated with firm performance and boards with smaller size have more efficiency than the larger ones (Garg, 2007). O'Connell and Cramer (2010) found that board size was negatively associated with firm performance for listed companies in Ireland.

The study conducted by Eisenberg et al. (1998) concluded that board size negatively correlated with profitability in small and midsize firms in Finland. On the contrary, Larmou and Vafeas (2010) argued that large boards were apparently to be positively related with shareholder value of smaller firms with a history of poor operating performance.

METHOD

This study employs quantitative approach, namely statistical associative method. In order to investigate the influence of board size on firm performance of listed companies in Indonesia, the multiple linear regression is utilized where dependent variable is firm performance and independent variables are the size of board commissioners and board of directors.

Data, variables and characteristics of sample

The population in this study is 192 industrial and manufacturing companies listed on the Indonesia Stock Exchange. Of the 192 companies, 32 meet the sampling criteria and hence taken as samples.

The sampling criteria are as follows:

Listed on the Indonesia Stock Exchange since or prior to 2 January 2014 and remain listed until 31 December 2018;

Have complete information required in this research;

Financial period ends at 31 December from 2014 to 2018; and

Have changed the board size during the observation period.

The sample size is considerably small due to the fact that many industrial and manufacturing companies listed on the Indonesia Stock Exchange from 2014 to 2018 did not change their board size. Hence, such firms have to be removed from the samples. In this paper, firm performance is measured with return on assets (ROA). Board size is measured with the amount of commissioners and directors. The required data are collated from online financial database namely Orbis and analysed using a software package for statistical analysis.

Regression model

The following model is used to investigate the influence of board size on firm performance of listed companies in Indonesia:

$$ROA = \beta_0 + \beta_1 BOC + \beta_2 BOD + \varepsilon$$

Where:

ROA = return on assets

BOC = size of board of commissioners

BOD = size of board of directors

RESULT AND DISCUSSION

The empirical results of this research are presented and discussed in this section. First, the average values of ROA and board size of listed companies in Indonesia are shown as follows:

Table 1. Average values of ROA and Board Size of the Samples

No.	Variables	Average Values
1.	Return on Assets	4.61%
2.	Size of Board of Commissioners	4.99
3.	Size of Board of Directors	5.80

Return on assets

The average ROA of sampled firms in this research is 4.61 between 2014 and 2018. The lowest level of ROA was reached in 2017 (3.09%) and it reached its peak in 2018 (7.24%).

Size of board of commissioners

On average, the sampled firms have 4.99 persons sitting in board of commissioners during the observation period. 2014 records the largest size of the board (5.28 persons) and it shrank to the lowest of 4.81 persons in 2018.

Size of board of directors

The size of board of directors in this research is not significantly different with the size of board of commissioners. The number of directors is 5.8 persons on average. Similar to board of commissioners, the highest average of directors number was reached in 2014 (6 persons) while its lowest level occurred in 2018 (5.53 persons).

Relationship between the Size of Board of Commissioners and ROA

The relationship between the number of commissioners and ROA of the sampled firms is shown in the following table:

Table 2. Regression result of the relationship

between ROA and board size				
Dependent Variable: ROA				
Method: Panel EGLS (Cross-section random effects)				
Date: 08/28/20 Time: 14:15				
Sample: 2014 2018				
Periods included: 5				
Cross-sections included: 32				
Total panel (balanced) observations: 160				
Swamy and Arora estimator of component variances				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
BOC	-0.137792	0.580681	-0.237294	0.8127
BOD	0.071562	0.540323	0.132442	0.8948
C	4.878575	3.928942	1.241702	0.2162
Weighted Statistics				
Root MSE	8.083221	R-squared	0.000371	
Mean dependent var	1.657504	Adjusted R-squared	-0.012363	
S.D. dependent var	8.110105	S.E. of regression	8.160084	
Sum squared resid	10454.15	F-statistic	0.029133	
Durbin-Watson stat	1.549942	Prob(F-statistic)	0.971292	

Based on the tables above, the research model equation is as follows.

$ROA = 4.88 - 0.14BOC + 0.07BOD$, where

ROA: Return on Assets

BOC: Board of Commissioners Size

BOD: Board of Directors Size

It can be seen from the table above that the p values of the size of board of commissioners and board of directors (0.8127 and 0.8948 respectively) are greater than α value (0.05). This means that the board size does not significantly influence the firm performance of industrial and manufacturing companies in Indonesia. In addition, the table also shows that the R-squared value is 0.000371 which means that only 0.04% of ROA variation can be explained by the board size and 99.96% of the variation is explained by other variables not employed in this research.

Classical assumptions test

This research utilizes the Generalized Least Square (GLS) with random effect, hence classical assumption test is not required (Gujarati & Porter, 2009). The decision to utilize GLS is made after conducting Chow Test, Hausman Test and Lagrange-Multiplier (LM) Model. These tests conclude that random effect is most suitable for this research, hence GLS is utilized.

CONCLUSION

This research investigates the influence of board size on firm performance in industrial and manufacturing listed companies in Indonesia. The research finding reveals that neither the size of board of commissioners nor the size of board of directors significantly influences the firm performance. Therefore, it contradicts the findings of the scholars who found either positive (Larmou

and Vafeas, 2010) or negative (e.g. Jensen, 1993; Lipton & Lorsch, 1992; Guest, 2009) influence from board size. This finding also implies that the board size does not correlate with the quality of supervision by board of commissioners and direction by board of directors.

Another important finding in this research is the extremely small R-Squared value which can be interpreted that board size plays no role in influencing the firm performance. This means that one may exclude board size from variables affecting firm performance. In other words, board size may be disregarded when one wants to investigate the possible causes of change in firm performance.

Some limitations and suggestions from this research are as follows:

The sampled firms are taken only from one industry, namely industrial and manufacturing industry. In order to create a clearer and more comprehensive picture of the board size-firm performance relationship, it is suggested that future researchers also include samples from other industries in their research.

The sample size is considerably small. In order to obtain a more robust and reliable result, it is recommendable for future researchers to enlarge the sample size by selecting samples from other industries and/or obtain primary data from the research population.

This research does not include the board independence as independent variables. It is possible that this variable is actually more influential to firm performance than board size, therefore adding this variable in a research model may improve the R-squared value.

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