DO OWNERSHIP STRUCTURES REALLY MATTER? A STUDY OF COMPANIES LISTED ON THE INDONESIA STOCK EXCHANGE

Nila Firdausi Nuzula and Chitra Sriyani De Silva Lokuwaduge*

Examining the ownership structure of Indonesian corporations and its contribution towards developing appropriate corporate governance is an interesting endeavour, as the country is putting a lot of effort in improving trusts and attracting more foreign investors. A concentrated ownership structure is a common feature in the Asia-Pacific region. For the present paper, an analysis was conducted centred on ownership structures and their impact on governance and firm value in Indonesia. Measurements for ownership structure were based on the percentages of institutional and managerial ownership, while independent commissioners, board of directors and audit committees were used to measure corporate governance and Tobin's Q was used to measure firm value. The results of the study, which is based on secondary data gathered from all the companies listed on the Indonesia Stock Exchange from 2009 to 2016, reveals that ownership structure affects two measures used for corporate governance and firm value. As expected, ownership structure shows a statistically significant relationship with corporate governance.

JEL classification: G00, G190, G320, G390, O53.

Keywords: Corporate governance, institutional, managerial, ownership, firm value, Indonesia, share-market.

^{*} Nila Firdausi Nuzula, Department of Business Administration, Universitas Brawijaya (e-mail: nilafia@ub.ac.id) and Chitra Sriyani De Silva Lokuwaduge, College of Business, Victoria University, Australia (e-mail: chitra.desilva@vu.edu.au).

I. INTRODUCTION

Indonesia has enormous growth potential because of its extensive natural resources and manpower. At the start of 2012, it was the largest economy in South-East Asia and the eighteenth largest economy in the world. The main contributors to economic development in the country during the 1980s and 1990s were large corporations owned by conglomerates. These entities tended to practice poor corporate governance. Following the financial crisis in 1997, the importance of reforming corporate governance to overcome the crisis and attract more foreign investment to Indonesia was recognized. Claessens and Fan (2002) noted that weak corporate governance in Asia was the result of a combination of ownership structure and the property rights systems, including lack of law enforcement. Large ownership potentially expropriated minority rights and was not adequately convincing to reduce the agency problems in Asia. Tabalujan (2002) explains that the high levels of Indonesian family connections in corporate management are an indication of the potential influence they have on corporate governance.

While in the current globalized economy, average duration of equity holdings has declined in major companies in English-speaking countries and the shareholders are more dispersed (Sikka and Stittle, 2017); corporations in Indonesia have experienced minimal change in their ownership structure. Known as a country with dense family shareholdings and government intervention, many companies in Indonesia are controlled by a small number of families and exclusive groups (Claessens, Djankov and Lang, 2000; Zhuang, Edwards and Capulong, 2001; Claessens and Fan, 2002). The positive value of family ownership is that it allows group members in conglomerates to quickly make strategic decisions. Coordination is also easier through informal communication and family channels. However, the intensity of business control in the hands of few families has become a high cost factor, resulting in a disorganized legal and judicial system.

Dispersed ownership makes it more difficult for shareholders to control companies (Sikka and Stittle, 2017) and the monitoring of the company become more widely distributed among shareholders. Global developments with regard to corporate governance is an interesting topic, expecially in Indonesia. Therefore, in the present study, up-to-date situations in Indonesia are described and the following questions are investigated: Is ownership a factor in increasing shareholder value? If so, which type of ownership is more effective in increasing shareholder value? This paper includes a study on the relationships among ownership structure, corporate governance and firm value. Also in the paper, objectives are set to examine whether those variables are correlated, and if the different types of corporate ownerships have a direct relationship with the improvement of firm value.

The authors find that two types of ownership, institutional and managerial ownerships, have significantly different impacts on corporate governance in Indonesia. Large institutional shareholdings represent a company that has an adequate monitoring scheme, although raising the percentage of managerial ownership may conflict with the current large shareholders' interests. Board of directors and audit committees are two measurements of corporate governance that affect firm value, while the presence of independent commissioners has no effect on the firm value. Another result is that ownership structure negatively affects firm value, implying that investors in the Indonesia Stock Exchange are not enthusiastic about investing in companies with a high concentration of instutional holdings.

The remainder of this paper is structured as follows. The next section contains a discussion on literature on the relationships between ownership structure, corporate governance, and firm value. Section III includes an outline the methodology and sampling technique applied. Section IV consists of a description of the results and an accompanying discussion, and the last section concludes the paper.

II. LITERATURE REVIEWS AND THE DEVELOPMENT OF HYPOTHESES

Zhuang, Edwards and Capulong (2001) explain that the quality of corporate governance is closely related to the ownership structure of a company. A survey they conducted shows that the characteristics of controlling shareholders in Indonesia vary to include individuals, families, holding companies or financial institutions. Corporations are dichotomous between the ones owned by local and foreign investors and between official related and non-official groups. Official-related groups are founded by people who are allied with former or current government officials. As Indonesia has the largest number of companies controlled by a single family among countries in the Asia-Pacific region, families retain control of the companies through ownership, management, or both, although some groups employ outside managers. If the family members cannot actively control the companies as the directors, they maintain their position as commissioners, which, in Indonesia are tasked with supervising the firm. When the controlling management becomes ineffective, it may be the result of several factors, including, among them, inadequacy of the regulatory framework supporting financial liberalization, heavy reliance on bank credits to finance investment and high ownership concentration among families with political affiliations, which is a factor that led to the severe financial crisis in Indonesia in 1997. To get out of the crisis, the Government recommended applying a corporate governance framework, which included protecting the rights of minority shareholders, improving the legal and regulatory agenda for bank supervision and protecting creditor's rights.

The main objective of corporate governance principles is to mitigate inter-agency conflicts, which may arise between managers and shareholders in firms through internal and external mechanisms (Jensen and Meckling, 1976). The conflicts usually occur when ownership is dispersed among a large number of shareholders, or between the controlling and minority shareholders in firms with a concentrated ownership structure (Shleifer and Vishny, 1997). Claessens and Fan (2002) further explain that the nature of the ownership structure in a company affect the nature of the problems between managers and outside shareholders. Diffused ownership, which is commonly seen in the United Kingdom of Great Britain and Northern Ireland and the United States of America, ultimately leads to conflict of interest between outside shareholders and managers who hold a limited amount of equity, while concentrated ownership, which is typically found in Asia, ultimately leads to conflicts between the controlling shareholder (who is often also the manager) and minority shareholders.

By building the link between ownership and corporate governance, Tabalujan (2002) has proposed that Indonesia serve as an example for the third model of corporate governance, which follows the market-based governance system practiced by corporations in Australia, Canada, the United Kingdom and the United States and the relationship-based governance system practiced by corporations in France, Germany and Japan. The third model is referrred to as family mercantilism, family business group or personal capitalism, as it is based on a family business in which the ownership and management are controlled by a family group, either nuclear or extended. The main ownership remains inside the group, with shares being distributed among the family members. Becaused of the close relationships of families, the concept of family values in Indonesia may have a greater impact on family capitalism as it is already formally well-recognized in daily business practices.

Tabalujan (2002) explains that the corporate governance system in a family business context is different from where the system originated. For example, accountability is referred to as collective, instead of individual accountability, by which family board members view and accept responsibility for their corporate functions. As western corporate governance follows a view that shareholders are distinct from the company and liable only to the extent of the value of their invested capital, the family approach calls for no separation between shareholders and the corporate entity. What is suffered by the company is felt by the shareholders. Any assets or gains of the company are also available to shareholders. Following the Chinese traditional view, a corporation may be more a nexus of a relationship rather than a nexus of contracts. Under this context, difference patterns of ownership and control rooted in being ethnocentric affects the system of corporate governance. Therefore, according to Claessens and Fan (2002), an alternative corporate governance mechanism is

required to improve the effectiveness of the framework applied in a system, particularly when the system is hit by a large crisis in locations where regulating institutions are weak and property rights are limited. This current research is aimed at examining how ownerships in Indonesia will affect the corporate governance of companies and firm value.

Ownership structure and corporate governance

Jensen and Meckling (1976) wrote the leading article on the conceptual relationship between property rights, agency theory and finance theory, which is used to develop a theory of ownership structure. A firm is a nexus for a set of contractual relationships, including a multitude of complex relationships between the firm (as legal fiction), such as a contract between principals and agents, and management and suppliers. It covers firms' contracts with various "inside" and "outside" stakes. In addition, the separation of ownership and control raises agency costs and problems, making the agency relationship non-optimal and inefficient. However, as the ownership becomes more concentrated, agency problems and costs decreases, and value-maximization increases.

The first proposition in this paper is that ownership structure has an influence on to what extent corporate governance is applied in Indonesian companies. Two proxies of ownership structure used are institutional and managerial ownerships, while three indicators of corporate governance are the proportion of independent commissioners, the number of board of directors and the presence of an audit committee. Shleifer and Vishny (1997) explained that ownership had greater capacity to monitor and issue voting rights, which made it possible for it to take corrective action to improve corporate governance practices in companies. Using the scheme, it is suggested in this study that institutional shareholding, which usually holds a large amount of stocks, can mitigate agency problems because they have strong motivation to monitor and discipline management. Therefore, this type of ownership can lead to better practices of corporate governance principles. Meanwhile, a significant percentage of managerial ownership has such an opportunity to ensure the improvement of corporate governance practices in the firms, as demanded by the stock market authorities.

Baker and Anderson (2010) explain that in many countries and in companies with a range of ownership structures, institutional shareholders are often influential. They comprise banks (as showed by *keiretsu* networks in Japan), sovereign wealth funds owned by governments, private equity firms, and hedge funds. The authors also state that families form the largest shareholders around the world. Because of the prominent role of family businesses in the allocation of resources, many studies have

scrutinized the impact they have on developing a corporate governance system in the companies, and correlated it with measures of economic output and firm value.

Studies conducted on the relationship between firm ownerships and corporate governance have come up with various results. In a study on Singaporean companies, Chen and Ho (2000) has found out that agency problems are more severe in firms with low managerial ownership. A substantial number of outside shareholders do not effectively control the agency problems. Institutional shareholders enhance firm value, as they tend to push listed companies to have better monitoring mechanisms (Mollah, AI Farooque and Karim, 2012). Morck, Shleifer and Vishny (1988) explain that the linear relationship reflects the convergence of interest between managers and shareholders and the limited level of agency problems. However, no studies have examined the contribution of managerial ownership to the improvement of corporate governance practices. This gap in such empirical studies is hopefully closed by this study. Therefore, the first proposal of this study is to examine the following hypothesis.

H₁: Ownership structure influences corporate governance

Corporate governance and firm value

The second proposal in this paper is that good practices of corporate governance can make daily activities in companies unbiased, efficient and goal oriented, and ultimately, increase shareholders' wealth. In this study, the authors propose that the appropriate proportion of independent commissioners, number of board of directors, and an audit committee represent good practices of the principles of corporate governance. Disclosing the measurement numbers in the firms' annual financial reports can raise the firms' value. Investors appreciate this effort and it consequently has a positive impact on the market value of the equity.

Some studies have examined the influence of corporate governance on firm value. However, they have provided contradicting results. Bai and others (2003) have found a meaningful correlation between the governance mechanisms and market valuation of public companies in China. They constructed a corporate governance index and applied Tobin's Q as the market value indicator. The findings indicate that investors pay a significant premium for well-governed firms in China. Carter, Simkins and Simpson (2003) use board diversity as the dimension of corporate governance, and relate it to firm value. The findings show that there are significant positive relationships between the fraction of women or minorities on the board and the value of the firms. Baek, Kang and Park (2004) study corporate governance practices in concentrated family ownership in the Republic of Korea. The study results indicate that firm-level differences in corporate governance indicators determine the change in

firm value during a crisis. In that situation, the equity values of chaebol firms with concentrated ownership by controlling family shareholders plunged more. Mollah, Al Farooque and Karim (2012) propose that an appropriate audit committee and larger membership on the board of directors ensure better governance and hence improve firm value. However, another finding of the study indicates that board characteristics variables have an insignificant relation with performance. The finding is interesting as normatively the size of the board implies levels of ability to increase a firm's value Therefore, in this current study following hypothesis is proposed as the next analysis.

H₂: Corporate governance influences firm value

Ownership structure and firm value

The third proposition in this paper is that ownership structure creates firm value. Two proxies of ownership structure, institutional and managerial shareholdings are used in this study to examine the relationships of these variables to firm value. A substantial number of institutional shareholding represent high density of the monitoring mechanism delivered by shareholders and controlling managers to achieve the objective to increase shareholders' wealth. This creates the high probability that the firms attain high value. Abdallah and Ismail (2017) state that ownership structure affects a firms' performance. Ownership concentration mitigates agency problems as the major shareholders have an acceptable authority of exercise over the firm's management.

Meanwhile, the relationship between managerial share-ownership with firm value has two meanings. Managerial shareholding helps to align the interests of managers and shareholders, and then lower agency costs, and it deters managers' engagement in profitable projects and manageable level of risks. As a result, there is positive relationship in which substantial percentages of managerial shareholding can increase firm value. On the other hand, the presence of managerial shareholding at a high level may create "entrenchment effects" in which managers can protect their non-diversifiable human capital and wealth invested in the firm at the expense of outside investors (Morck, Shleifer and Vishny, 1988; Margaritis and Psillaki, 2010). Therefore, the relationship between these two variables is predicted to be negative as the rise of managerial ownership may decrease firm value.

Other papers have shown different results on this issue. Jensen and Meckling (1976) explain the presence of the "convergence-of-interest" hypothesis that major management ownership increases firms' market values. A high percentage of management ownership allows the cost of deviation from the value-maximization target to decline. Morck, Shleifer and Vishny (1988) found that firm value measured by Tobin's Q increased in line with an increase in the board ownership to 5 per cent.

However, the value fell as the ownership rose further to 25 per cent and continued to increase slowly when board ownership topped 25 per cent. Chen and Ho (2000) found that ownership structure measured as the total percentage holdings of directors had an impact on the Tobin's Q. Lins (2003) studied 1,433 firms from 18 emerging markets and found that firm values are lower when management holdings exceed cash flow rights. Mollah, Al Farooque and Karim (2012) explain that managerial share ownership is representative of the presence of managerial control.

In terms of institutional ownerships, some studies have also come up with mixed findings. Lins (2003) shows that in low shareholder protection countries, large non-management control rights blockholdings are correlated positively with firm values, suggesting that a high percentage of large shareholdings leads to an increase in firm values. Baek, Kang and Park (2004) explain that during the financial crisis in the Republic of Korea in 1997, firms with higher ownership concentration by unaffiliated foreign investors experienced a slight decrease in their share value. Minguez-Vera and Martin-Ugedo (2007) has found a non-significant relationship between major shareholders as an institution and firm value. Interestingly, the study indicates that the concentration of shareholdings does not affect the value of the firm. The study results show that major institutional ownership adversely affects a firm's financial performance and value, while dispersed ownerships improves a firm's performance and mitigates agency problems in the Botswana stock market. These variations in the results present the opportunity to study this issue further. Therefore, for this study, the third hypothesis is as follows.

H₃: Ownership structure influences firm value

In summary, the structure of the relationship between these three variables is illustrated in this following model.

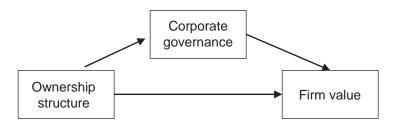


Figure 1. General relationship model

III. METHODOLOGY AND SAMPLE

First, for this study, all public companies listed on the Indonesia Stock Exchange (IDX) over an eight-year period spanning from 2009 to 2016 are used as the initial sample. Financial data are gathered using the annual reports of the listed companies published on the IDX website (www.idx.co.id/index-En.html). In this study, observations with unavailable data are excluded. As a result, the number of observations varies according to the availability of data, as illustrated in table 1. Base on the selection criteria, the sample consists of 425 listed companies with 1,700 firm year observations.

Assessing the level of corporate governance practiced in an individual company may be subjective. Therefore, for this study quantitative measurements are applied to minimize this problem. Two measurements of ownership structure are tested: institutional and managerial ownerships. Institutional ownership (institutional) represents percentage of shares held by large shareholders, including State-owned shares and shares held by parent companies. Managerial ownership (management) represents the percentage of shares owned by the managers of the companies. Four variables are used as proxies of corporate governance, namely the proportion of independent or external commissioners as a percentage of total commissioners (IC) during one accounting period; the number of independent members in audit committees (AC) and board of directors (BOD). International Finance Corporation (2014) finds that the number of directors and percentage of independent commissioners are suitable indicators to measure good board practices in Indonesia. Finally, Tobin's Q (TobinsQ) is applied to measure firm value. Tobin's Q is defined as the market value of assets divided by the replacement value of assets. In addition, the market value of assets is denoted by the sum of the book value of assets and the market value of common outstanding stocks. Then, the sum of the book value of common stock and balance sheet deferred taxes is subtracted. The replacement value of assets is measured by the book value of assets (Bauer, Guenster and Otten. 2004). In this study, Tobin's Q is calculated by using the following formula.

Tobin's
$$Q = \frac{Market \ value \ of \ equity + Book \ value \ of \ debt}{Book \ value \ of \ total \ assets}$$

Controlling variables used in this study are total assets as a measurement of size (Size), earnings per share (EPS), debt to assets ratio (DAR), natural logarithm of dividend yield (Yield). Return on assets (ROA) and return on equity (ROE) are used as firm accounting performance indicators to examine the robustness of the models. Using natural data taken from each measurement, a standardizing menu in regression analysis to overcome variations among all indicators is applied.

A correlation matrix is used to calculate the correlation among these variables. Following the results of correlation matrix, the influence of some independent variables to dependent variable is examined using multivariate regression analyses in SPSS20. The stepwise method is applied to cautiously control multicollinearity as seen in the correlation matrix. Multicollinearity is common problem in multivariate regressions that involve various proxies in the same analysis. Here the models are applied to test the hypotheses.

Corporate governance = f (Ownership structure)

Firm value = f (Corporate governance)

Firm value = f (Ownership structure)

IV. RESULTS AND DISCUSSION

Summary statistics

For this study, regression analysis is applied to examine the relationship between ownership structure, corporate governance and firm value. Before the analysis, the authors had conducted a review to determine whether some classic assumptions had been fulfilled. The results showed that the heteroskedasticity problem did not exist. The Durbin-Watson statistic was also found to be close to two, meaning that no autocorrelation problem was prevalent in the models. Summary statistics for the firms-year unit analysis are illustrated in table 1.

The table reflects the number of available year-firm unit of analysis, mean, minimum, maximum, and standard deviation of dependent and independent variables. The minimum value of proportion for independent commissioner (IC), institutional and managerial ownership shows a null value, while the minimum board of members (BOD) and audit committee (AC) is one person. The numbers of IC, BOD, and AC indicate the efforts of Indonesian listed companies to comply with corporate governance practices. Institution variable has a higher mean value (65.47 per cent), even the maximum percentage is 100 per cent, compared to the mean of managerial ownership of only 1.36 per cent. It shows a high concentration of ownership held by institutional shareholders in listed companies in Indonesia, although the deviation is also relatively high. The maximum proportion of independent commissioners is 1 per cent, meaning that on average there are 1-2 independent commissioners among 4-5 members of commissioners.

Table 1. Summary statistics

Variables	N	Minimum	Maximum	Mean	Std. deviation
Inst (per cent)	3 148	0	100	65.47	22.831
Mgt (per cent)	3 147	0	74	1.36	6.437
IC (per cent)	3 191	0	1	0.38	0.160
BOD (person)	3 182	1	13	4.52	2.038
AC (person)	3 175	1	11	2.39	1.401
Size (Rp)	3 191	27 408 446	1.E+15	1.65E+13	7.202E+13
TobinsQ (per cent)	3 191	-9	145	1.82	3.814
EPS (Rp)	3 190	-43 857	306 959	523.62	6 559.237
DAR (per cent)	3 191	0	163	0.74	4.042
Yield (per cent)	1 747	0	89	2.59	5.131
ROA (per cent)	3 185	-2 402	2 418	5.82	69.536
ROE (per cent)	3 188	-1 518	4 429	13.93	123.224

Note:

Inst: the percentage of institutional shareholding; Mgt: the percentage of managerial shareholding; IC: proportion of independent committee; BOD: the number of board of directors members; AC: the number of audit committee members; Size: firm size, measured by total assets; TobinsQ: Tobin's Q, measured by ratio between market value of equity plus book value of debt to book value of total assets; EPS: earnings per share; DAR: total debt to asset ratio; Yield: dividend yield, ROA: return on assets; ROE: return on equity.

Table 2. Results of regression analyses (dependent variable: corporate governance)

Explanatory			t value			
variables	1.1a	1.1b	1.2a	1.2b	1.3a	1.3b
	IC	IC	BOD	BOD	AC	AC
Institutional	2.823**	_	7.059**	_	-0.784	_
Managerial	_	-2.942**	_	-4.433**	-	-1.079
IC	_	_	_	_	_	_
BOD	_	-	_	_	_	_
AC	_	-	_	_	_	_
Size	_	-	_	_	_	_
EPS	_	-	_	_	_	_
DAR	_	-	_	_	_	_
Yield	_	_	_	_	_	_
F	7.967	8.654	49.824	19.656	0.615	1.164
Adj R sq.	0.002	0.002	0.015	0.006	0.000	0.000
Sig.	0.005**	0.003**	0.000**	0.000**	0.433	0.281

The presence of the multicollinearity problem among the variables linked to firm value and corporate governance by applying correlation matrix is also examined in this study (table 3). Following the recommendation that multicollinearity occurs, if the tolerance level is less than 0.01 and 0.05, Pearson's correlation matrix shows several potential problems, namely between institutional and managerial ownership, and among IC, BOD and AC. Therefore, for this study these variables are not applied in one model simultaneously, but rather they are relied on to deliver different information by applying them in univariate regression analysis, except for models using controlling variables. As a consequence, testing models that analyse the influences of ownership structure to corporate governance variables and corporate governance variables to firm value simultaneously are not applied. Here the formulation of expanded regression models is applied instead.

CG	=	f (Ownership structure)	
IC	=	f (Institutional)	Model 1.1a
IC	=	f (Managerial)	Model 1.1b
BOD	=	f (Institutional)	Model 1.2a
BOD	=	f (Managerial)	Model 1.2b
AC	=	f (Institutional)	Model 1.3a
AC	=	f (Managerial)	Model 1.3b

To examine the second hypothesis, IC, BOD and AC are used as the independent variables partially because they are predicted to create firm value (Models 2.1a-c). Next, Models 2.2a-c are applied to examine whether the influences of corporate governance factors are improved when several controlling variables, EPS, DAR and Yield are considered.

Firm value	= f (Corporate governance)	
TobinsQ	= f(IC)	Model 2.1a
TobinsQ	= f(BOD)	Model 2.1b
TobinsQ	= f(AC)	Model 2.1c
TobinsQ	= f (IC, Size, EPS, DAR, Yield)	Model 2.2a
TobinsQ	= f (BOD, Size, EPS, DAR, Yield)	Model 2.2b
TobinsQ	= f (AC, Size, EPS, DAR, Yield)	Model 2.2c

Table 3. Correlation matrix

Namageria Pearson Corr. 1 1 1 1 1 1 1 1 1			Institutional	Managerial	21	BOD	AC	Size	TobinsQ	EPS	DAR	DivYield	ROA	ROE
gerial Dearson Corr. -0.261** 1 Sig. (2-tailed) 0.000 1 1 N 3143 3147 1 N 1.48* -0.000 1 Sig. (2-tailed) 0.08 0.994 1 N 3148 3147 3191 N 3148 3147 3191 Pearson Corr. 0.078* 0.076** 1 Sig. (2-tailed) 0.000 0.000 0.000 N 3140 3140 3182 3175 Sig. (2-tailed) 0.013 0.015** 0.054** 1 Sig. (2-tailed) 0.030 0.050 0.000 N N 3143 3147 3147 3147 3149 Sig. (2-tailed) 0.030 0.050 0.000 0.000 0.000 N N 3148 3147 3191 3142 3141 Sig. (2-tailed) 0.000 0.000 0.000 0.000 0.001<	Institutional	Pearson Corr. Siq. (2-tailed)	_											
genfal Pearson Corr. -0.281** 1 Sig. (2-tailed) 0.000 1 ************************************		Z	3 148											
Sig. (2-tailed) 0,000 1 N Pearson Corr.	Managerial	Pearson Corr.	-0.261**	_										
N 594 3 147 3 147 3 147 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		Sig. (2-tailed)	0.000											
Sig. (2-tailed) 0.048* -0.000 1 N 3148 3147 3191 7 A A Pearson Corr. 0.125** -0.079** 0.076** 1 A A Sig. (2-tailed) 0.000 0.000 0.000 0.000 0.000 0.000 N 3140 3140 3142 3182 3182 1 A A Sig. (2-tailed) 0.000 0.000 0.000 0.000 0.000 0.000 N 3133 3133 3175 3175 3175 A Sig. (2-tailed) 0.188 0.281 0.000 0.000 0.000 N 3148 3147 3182 3175 3175 3171 Sig. (2-tailed) 0.188 0.022 0.000 0.000 0.002 0.000 0.000 N 3148 3147 3148 3148 3148 3149 3141 3141 3141 3141 3141 <		z	3 143	3 147										
Sig. (2-tailed) 0.08 0.994 1 N 3148 3147 3191 1 Pearson Corr. 0.125** -0.079** 0.076** 1 Sig. (2-tailed) 0.000 0.000 0.000 0.000 N 3140 3142 3182 1 Pearson Corr. -0.014 -0.019 0.158** 0.254** 1 N 3133 3175 3175 3175 1 Sig. (2-tailed) 0.433 0.160** 0.200 0.000 0.000 N 3148 3175 3175 3175 1 Sig. (2-tailed) 0.018 0.022 0.000 0.000 0.000 Sig. (2-tailed) 0.018 0.022 0.000 0.000 0.000 Sig. (2-tailed) 0.000 0.023 0.356 0.017 0.032 0.017 N N 3148 3147 3141 3142 3141 3141 3141 Sig. (2-tai	2	Pearson Corr.	0.048*	-0.000	_									
N 3148 3147 3191 3147 3191 3147 3191 3148 3147 3191 3148 3147 3191 3149 3149 3149 3149 3149 3149 3149		Sig. (2-tailed)	0.08	0.994										
Sig. (2-tailed) 0.075** 0.079** 0.076** 1 Sig. (2-tailed) 0.000 0.001 0.00		z	3 148	3 147	3 191									
Sig. (2-tailed) 0.000 0.000 0.000 0.000 0.000 0.000 0.0054** 0.254** 1 2 2 2 2	ВОД	Pearson Corr.	0.125**	-0.079**	0.076**	_								
N 3140 3182 3182 3182 3182 3182 3182 3182 3182		Sig. (2-tailed)	0.000	0.000	0.000									
Sig. (2-tailed) 0.014 0.019 0.158** 0.254** 1 A A A B		z	3 140	3 140	3 182	3 182								
Sig. (2-tailed) 0.433 0.281 0.000 0.000 N 3133 3175 3175 3175 175 Pearson Corr. -0.030 -0.035* 0.160** 0.295** 0.234** 1 Sig. (2-tailed) 0.018 0.022 0.000 0.000 0.006 0.004* Sig. (2-tailed) 0.000 0.023 0.356 0.017 0.003 0.001 0.001 N 3148 3147 3191 315 3191 3191 Pearson Corr. 0.050* 0.034 0.042* 0.042* 0.004 0.004 0.004 Sig. (2-tailed) 0.004 0.057 0.003* 0.014 0.006* 0.001 0.004 0.001 0.004 0.001 0.004 0.001 0.004 0.001 0.004 0.004 0.004 0.001 0.006 0.000 0.001 0.006 0.001 0.006 0.001 0.006 0.001 0.006 0.001 0.006 0.001 0.00	AC	Pearson Corr.	-0.014	-0.019	0.158**	0.254**	_							
N 3133 3175 3181 3182 3175 3191 3191 3191 3181 3182 3175 3191 31		Sig. (2-tailed)	0.433	0.281	0.000	0.000								
Sig. (2-tailed) 0.036 0.0160** 0.295** 0.295** 0.295** 1 <td></td> <td>z</td> <td>3 133</td> <td>3 133</td> <td>3 175</td> <td>3 175</td> <td>3 175</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>		z	3 133	3 133	3 175	3 175	3 175							
Sig. (2-tailed) 0.188 0.022 0.000 0.000 0.000 N 3148 3147 3191 3182 3175 3191 7 SQ Pearson Corr. -0.065** -0.040* 0.016 -0.042* 0.052* 0.046** 1 N 3148 3147 3191 3182 3175 3191 3191 Pearson Corr. 0.050* 0.023 0.366 0.017 0.003 0.014 0.016** 0.001 Sig. (2-tailed) 0.004 0.057 0.000 0.412 0.006 0.821 0.545 N 3147 3146 0.014 -0.014 0.006 0.821 0.016 0.003 Pearson Corr. 0.066** 0.076 0.014 0.014 0.006 0.821 0.006 0.001 Pearson Corr. 0.066** 0.076 0.014 0.014 0.014 0.006 0.821 0.016 0.001 Sig. (2-tailed) 0.000 0.366	Size	Pearson Corr.	-0.030	-0.035*	0.160**	0.295**	0.234**	_						
SQ Pearson Corr. -0.065** -0.040* 0.016 -0.042* 0.052** 0.046** 1 Sig. (2-tailed) 0.000 0.023 0.036 0.017 0.003 0.001 1 N N 3148 3147 3191 3182 3175 3191 3191 Pearson Corr. 0.050* 0.034 -0.063** -0.014 -0.066** 0.004 -0.017 -0.014 -0.066** 0.004 -0.014 -0.016 -0.014 -0.016 -0.014 -0.016 -0.016 -0.014 -0.016 -0.016 -0.014 -0.022 -0.016		Sig. (2-tailed)	0.188	0.022	0.000	0.000	0.000							
sQ Pearson Corr. -0.065** -0.040* 0.016 -0.042* 0.052** 0.065** 1 Sig. (2-tailed) 0.000 0.23 0.356 0.017 0.003 0.017 0.003 0.017 0.003 0.017 0.006 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.000 0.003 0.001 0.001 0.001 0.001 0.000 0.001 0.001 0.001 0.001 0.001 0.002 0.001 0.002 0.001 0.002 0.001 0.002 0.001 0.002 0.003 0.002 0.001 0.003		z	3 148	3 147	3 191	3 182	3 175	3 191						
Sig. (2-tailed) 0.000 0.033 0.356 0.017 0.003 0.001 N 3148 3147 3191 3182 3175 3191 3191 Pearson Corr. 0.050** 0.034 -0.063** -0.014 -0.066** 0.004 -0.011 1 Sig. (2-tailed) 0.004 0.057 0.007 0.412 0.000 0.821 0.545 N 3147 3146 3180 3181 3174 3190 3190 Pearson Corr. -0.066** -0.014 -0.014 -0.022 -0.016 0.001 -0.006 -0.003 Sig. (2-tailed) 0.000 0.366 0.279 0.221 0.375 0.889 0.752 0.845 N 3148 3147 3191 3182 3175 3191 3191 3190	TobinsQ	Pearson Corr.	-0.065**	-0.040*	0.016	-0.042*	0.052**	0.046**	_					
N 3148 3147 3191 3182 3175 3191 3191 3191 Pearson Corr. 0.050* 0.034 0.063* 0.014 0.066** 0.004 -0.014 -0.066** 0.007 0.011 1 Sig. (2-tailed) 0.004 0.057 0.014 0.012 -0.016 0.001 0.006 3190 3190 Pearson Corr. 0.066* 0.279 0.279 0.271 0.375 0.085 0.003 N 3148 3147 3191 3175 3191 3191 3190		Sig. (2-tailed)	0.000	0.023	0.356	0.017	0.003	0.001						
Pearson Corr. 0.050** 0.034 -0.063** -0.014 -0.066** 0.004 -0.011 1 Sig. (2-tailed) 0.004 0.057 0.000 0.412 0.000 0.821 0.545 N 3147 3146 3190 3181 3174 3190 3190 Pearson Corr. -0.066** -0.014 -0.022 -0.016 0.001 -0.006 -0.003 Sig. (2-tailed) 0.000 0.366 0.279 0.271 0.375 0.889 0.752 0.845 N 3148 3147 3191 3182 3175 3191 3190		z	3 148	3 147	3 191	3 182	3 175	3 191	3 191					
Sig. (2-tailed) 0.004 0.057 0.000 0.412 0.000 0.821 0.545 N 3.147 3.146 3.190 3.181 3.174 3.190 3.190 Pearson Corr. -0.067** -0.016 -0.014 -0.022 -0.016 0.001 -0.006 -0.003 Sig. (2-tailed) 0.000 0.366 0.279 0.221 0.375 0.889 0.752 0.845 N 3.148 3.147 3.191 3.182 3.175 3.191 3.191 3.190	EPS	Pearson Corr.	0.050**	0.034	-0.063**	-0.014	**990.0-	0.004	-0.011	_				
N 3147 3146 3190 3181 3174 3190 3190 3190 3190 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9		Sig. (2-tailed)	0.004	0.057	0.000	0.412	0.000	0.821	0.545					
Pearson Corr. -0.067** -0.016 -0.014 -0.022 -0.016 0.001 -0.006 -0.008 Sig. (2-tailed) 0.000 0.366 0.279 0.221 0.375 0.889 0.752 0.845 N 3.148 3.147 3.191 3.182 3.175 3.191 3.191 3.190		z	3 147	3 146	3 190	3 181	3 174	3 190	3 190	3 190				
g. (2-tailed) 0.000 0.366 0.279 0.221 0.375 0.889 0.752 0.845 3 148 3 147 3 191 3 182 3 175 3 191 3 190	DAR	Pearson Corr.	-0.067**	-0.016	-0.014	-0.022	-0.016	0.001	-0.006	-0.003	-			
3148 3147 3191 3182 3175 3191 3191 3190		Sig. (2-tailed)	0.000	0.366	0.279	0.221	0.375	0.889	0.752	0.845				
		z	3 148	3 147	3 191	3 182	3 175	3 191	3 191	3 190	3 191			

Table 3. (continued)

		Institutional Managerial	Managerial	೨	BOD	AC	Size	TobinsQ	EPS	DAR	DivYield	ROA	ROE
DivYield	Pearson Corr.	0.051*	-0.019	0.052*	0.026	0.040	-0.013	-0.064**	0.071**	-0.022	-		
	Sig. (2-tailed)	0.033	0.434	0.029	0.278	0.093	0.576	0.007	0.003	0.361			
	z	1 730	1 727	1 747	1 746	1 743	1 747	1 747	1 747	1 747	1 747		
ROA	Pearson Corr.	0.050**	-0.004	0.000	0.030	0.015	-0.004	-0.008	0.030	0.102**	0.044	_	
	Sig. (2-tailed)	0.005	0.812	0.981	0.095	0.395	0.827	0.638	0.086	0.000	0.064		
	z	3 142	3 141	3 185	3 176	3 169	3 185	3 185	3 184	3 185	1 745	3 185	
ROE	Pearson Corr.	0.000	-0.008	-0.039*	0.012	0.040*	0.011	0.001	0.042*	-0.011	0.058*	0.333**	_
	Sig. (2-tailed)	0.981	0.650	0.029	0.502	0.025	0.542	0.963	0.018	0.533	0.016	0.000	
	z	3 145	3 144	3 188	3 179	3 172	3 188	3 188	3 187	3 188	1 746	3 184	3 188

**Correlation is significant at the 0.01 level (2-tailed). *Correlation is significant at the 0.05 level (2-tailed). Note:

For the third hypothesis, the equations without and with controlling variables are applied. The models are as follow.

TobinsQ	= f (Institutional)	Model 3.1a
TobinsQ	= f (Managerial)	Model 3.1b
TobinsQ	= f (Institutional, Size, EPS, DAR, Yield)	Model 3.2a
TobinsQ	= f (Managerial, Size, EPS, DAR, Yield)	Model 3.2b

Afterwards, accounting-based financial proxies, ROA and ROE are used as the dependent variable to examine the robustness of the results of the third analysis. Therefore, the formulas are as follow.

ROA	=	f (Institutional)	Model 4.1a
ROA	=	f (Managerial)	Model 4.1b
ROE	=	f (Institutional, Size, EPS, DAR, Yield)	Model 4.2a
ROE	=	f (Managerial, Size, EPS, DAR, Yield)	Model 4.2b

Following the models, several analyses are conducted. The description then flows in accordance to ownership factors that determine corporate governances. The results of the analysis towards the models are presented in tables 4 and 5.

Findings

The table illustrates that the four first models applied to analyse the influences of institutional and managerial to the corporate governance variables, namely the proportion of IC and the number of BOD, are significant (sig < 0.05). Interestingly, among them, two models that analyse managerial influence on IC and BOD are negatively significant (Models 1.1b and 1.2b), while the institutional factor is positively meaningful (Models 1.1a and 1.2a). Meanwhile, these two ownership factors are not notably providing impacts on AC suggesting that in any circumstance institutional and managerial ownership individually do not affect the number of audit committee (Models 1.3a and 1.3b).

The results of analysing the influences of ownership structure, corporate governance and other controlling variables to firm value are described in table 4. The content indicates that among the three indicators of corporate governance, only two corporate governance measurements, the number of BOD and AC, are affecting Tobin's Q (Models 2.1b-c, and Models 2.2b-c). While BOD has a negative influence,

Table 4. Results of regression analyses (dependent variable: firm value)

						t value				
Variables	2.1a	2.1b	2.1c	2.2a	2.2b	2.2c	3.1a	3.1b	3.2a	3.2b
	TobinsQ	TobinsQ	TobinsQ	TobinsQ	TobinsQ	TobinsQ	TobinsQ	TobinsQ	TobinsQ	TobinsQ
Institutional	I	I	I	I	I	ı	-3.651**	ı	-3.511**	ı
Managerial	I	I	I	I	I	I	I	-2.272*	I	-1.246
<u>0</u>	0.923	I	I	0.677	I	I	I	I	I	I
BOD	I	-2.381*	I	I	-4.479**	I	I	I	I	I
AC	I	I	2.945**	I	I	2.959**	I	I	I	I
Size	I	I	I	3.509**	5.065**	2.664**	I	I	3.566**	3.632**
EPS	I	I	I	-1.302	-1.286	-0.950	I	I	-1.060	-1.378
DAR	I	I	I	0.274	0.054	0.311	I	I	0.154	0.236
Yield	1	I	I	-2.499*	-2.409*	-2.737**	1	I	-2.362*	-2.545*
Ш	0.852	5.669	8.671	4.671	8.638	6.393	13.329	5.162	7.002	4.822
Adj R Sq.	0.000	0.002	0.002	0.010	0.021	0.015	0.004	0.001	0.017	0.011
Sig.	0.356	0.017**	0.003**	0.000**	0.000**	0.000**	0.000**	0.023*	0.000**	0.000**

Table 5. Results of regression analyses (dependent variable: financial performance)

		t va	alue	
Variables	4.1a	4.1b	4.2a	4.2b
	ROA	ROA	ROE	ROE
Institutional	2.782**	_	-0.593**	-
Managerial	_	-0.238	_	-0.232
IC	_	_	_	_
BOD	_	_	_	_
AC	_	_	_	_
Size	_	_	0.924	0.939
EPS	_	_	6.824**	6.787
DAR	_	_	-0.600	-0.585
Yield	_	_	1.962	1.932
F	7.739	0.057	10.810	10.738
Adj R Sq.	0.002	0.000	0.028	0.027
Sig.	0.005*	0.812	0.000**	0.000**

AC affects Tobin's Q positively. When comparing Models 2.1a and 2.2a, it is known that IC does not influence Tobin's Q, both individually and when the variable is combined with controlling variables. Model 2.2b implies that BOD has greater influence to Tobin's Q when it is combined with controlling variables influencing Tobin's Q (compare F value Model 2.1b that is 5.669 greater than 8.638 F value in Model 2.2b). Among controlling variables, size and dividend yield have significant influence on Tobin's Q.

In analysing the influence of ownership structure to Tobin's Q, it is found that institutional ownership cannot influence firm value individually (Model 3.1a), while in multivariate analysis with controlling variable, institutional ownership has significant influence (Model 3.2a). Contrarily, the presence of managerial ownership individually has significant and negative influences to firm value (Model 3.1b). However, managerial ownership does not affect the dependent variable when it is analysed together with controlling variables (Model 3.2b). A notable finding is that both measurements of ownership structure have negative impact on firm value. Table 4 also depicts that size and yield as two controlling variables are consistent showing significant impacts to firm value in all models.

Table 5 shows results of robustness analysis on the influences of ownership structure towards firms' financial performance, measured by ROA and ROE. Scholars have applied financial performance differently as compared with firm value, as the former is an accounting-based measurement while the latter is developed from market value of outstanding shares. The findings show that institutional holdings have significant influence on ROA and ROE, while the relationship does not exist for managerial ownership. When the controlling variables are applied, the influence of institutional ownership is less robust and even negative (t value is -0.593 in Model 4.2a, compare to t value 2.782 when the Model 4.1a is univariate analysis). Contrarily, Model 4.2b, which comprises managerial and controlling variables, is proven to be significant to predict ROE.

Discussions

Relationships between ownership structure and corporate governance

The findings suggest that the percentages of institutional and managerial ownerships in Indonesia are statistically significant to influence corporate governance, measured by the proportion of the number of independent commissioners and board of directors. However, these ownership variables do not influence the audit committee. They confirm the view of Bauer, Guenster and Otten (2004) that there is a growing interest from investors concerning the practices of corporate governance within corporations. According to Bauer, Guenster and Otten (2004), institutional investors would like the role of corporate governance of the companies to be included in their investment evaluation policy decisions. The presence of institutional investors is a signal that a company is making efforts to improve the level of governance system. Mollah, Al Farooque and Karim (2012) state that higher institutional ownership is considered to be better monitoring mechanisms of the listed companies. A large percentage of share ownership leads to shareholder activism and it has a significant role to monitor and improve the level of companies' good corporate governance practices. Park and Shin (2004) have found that together with the presence of directors with financial expertise background, institutional shareholders of listed companies in Canada are playing an active role in reducing earnings management. However, in this present study, it had been found that large institutional investors do not influence the establishment of audit committees. In Indonesia, listed companies are required to set up an audit committee to ensure compliance with corporate governance principles, therefore the relationship is not significant.

It should be noted that the coefficient for managerial ownership in all models that relate to corporate governance measurements shows a negative value. This suggests that companies with a higher percentage of managerial ownerships tend to

reduce the proportion of independent commissioners and board of directors and audit committees. In most large corporations owned and controlled by institutions and conglomeration, the existence of and suggestions to raise managerial ownership tends to conflict with corporate governance practices. Synchronizing major and managerial shareholders by increasing the managerial ownership does not likely seem to occur in Indonesia in the near future. Managerial ownership specifically does not appear to be significant in determining the presence of an audit committee. As Indonesian companies apply a two-tiered system, this result may suggest that the presence of managerial ownership may complement or partly substitute the role of audit committee to manage oversight tasks. Indeed, this assumption needs to be confirmed by further research.

It has been found that institutional and managerial ownerships do not statistically have a significant influence on the establishment of an audit committee, implying that the listed companies on the Indonesia Stock Exchange comply with the requirement to establish an audit committee irrespective of the company's ownership structure. In fact, under the Indonesian Corporate Governance Code, it is recommended that all listed companies establish several board committees, including an audit committee (International Finance Corporation, 2014).

Relationship between corporate governance and firm value

The results of the study indicate that two measurements for corporate governance, BOD and AC, are significantly determining Tobin's Q both with and without controlling variables, while the presence of IC does not affect the dependent variable. Related to BOD, these results challenge the findings of Mollah, Al Farooque and Karim (2012), which find it to be positive but insignificant. Conversely, the current research shows the significant and negative influence of BOD to Tobin's Q. It implies that the higher number of BOD, the lesser achievement of Tobin's Q. As a measurement of hybrid performance, combined accounting- and market-based performance, Tobin's Q represents investors' appreciation to firm performance. A higher number of BOD membership would cause inefficiency, which becomes cost-consuming and decreases financial performance.

Under the Indonesian Code of Good Corporate Governance, BOD should comprise members, who enable to make effective, right and timely decisions and to act independently. The members must also have integrity, experience and help the company achieve profitability and ensure sustainability. The members of BOD are also required to gain an understanding of and implement the good corporate governance code. As this study finds that the number of BOD significantly and negatively affects Tobin's Q, it implies that the markets presume the number is not in

accordance with firm value. This study leaves open for inquiry what level of BOD membership satisfies the markets for further studies.

The Good Corporate Governance Code indicates that all companies, represented by BOD, attain transparency, accountability, responsibility, independency, and fairness by also considering stakeholders' interests. In terms of complying with transparency and accountability, under the Code, listed companies are required to prepare and ensure sound communication between the company and its stakeholders. Company information must be available and accessible to stakeholders in line with the need of stakeholders. The number of BOD as the proxy in this study does not seem to be adequate to cover an inquiry whether BOD is performing well and accomplishing their duties. A comparison of the results of significant associations between BOD and Tobin's Q (that has a negative sign) and AC to Tobin's Q (that has positive sign), however, shows that the markets positively appreciate the numbers of AC than BOD.

Under the Code, all listed companies on the Indonesia Stock Exchange must prepare an annual report on implementing good corporate governance. The report should include work guidelines for BOD and commissioners, an applicable code of conduct, the functions of risk management and internal audit. Subsequently, there are some further requirements. BOD of companies in the financial sector must add information about the results of a self-assessment regarding their achievements, while managements of State-owned enterprises must provide the results of assessments undertaken by the Financial and Development Supervisory Bodies and the follow-up actions taken. Considering the results of this study, the markets do not appear to be reacting to the information that BOD is practicing the principles, while they respond more to the AC activities. This finding suggests that the Government of Indonesia should support the establishment of an independent body to assess and rank the accomplishments of corporate governance principles in public (and later private) Indonesian companies. Self-assessment does not appear to be satisfactory to the markets as it tends to be normative and subject to window dressing.

The presence of AC leads to an increase in Tobin's Q, implying that investors in the market respond positively to the presence of an appropriate audit committee. This is similar to the findings of Mollah, Al Farooque and Karim (2012) and Chan and Li (2008) that the audit committee plays a vital role as a corporate governance mechanism that influences a firms' performance. International Finance Corporation (2014) states that the audit committee is the most important committee in terms of representing shareholders' interests. As Tobin's Q is calculated based on market value, it seems that investors in Indonesia are comfortable with AC. Corporate governance principles require companies to set up an audit committee with an

appropriate number of members and that the members have the necessary financial background. The combined results from testing Models 1.3a-b, 2.1c and 2.2c shed light on the current information that investors have comprehended the important role of the audit committee in propagating principles of good governance, regardless of the ownership structure in Indonesia. AC represents a direct connection with external and internal auditors who are believed to be more independent than other departments of the firm. The greater number of member on AC, up to the certain level, will lead to an increase in the firm value. Of course, the higher number of AC membership could result inefficiency and lead to decline in firm value. This study leaves the determination of appropriate number of members for further research.

The results of testing Models 2.1a and 2.2a show that the percentage of independent commissioners does not influence the value of the firm. In the Indonesian Code of Good Corporate Governance, it is stated that the Board of Commissioners may consist of some independent commissioners. The independent commissioners are evaluated and appointed prior to the general meeting of shareholders by the nomination and remuneration committee, by considering the opinion of minority shareholders. However, appointing independent commissioners through this meeting in firms in which institutional shareholders are dominant may compromise the independence of the commissioners.

Next, in carrying financial audit activities, board of commissioners could be assisted by an audit committee that is chaired by an independent commissioner. Considering this composition, the findings reflect that in the case of Indonesia, investors do not consider the presence of independent commissioners when establishing good corporate governance, but rely on the audit committee instead. The requirements stated in the Indonesian Code of Good Corporate Governance may explain this result. First, the Code obliges public companies, State-owned enterprises, companies that raise and manage public funds and companies with extensive influence on environment to establish an independent audit committee. Otherwise, the Indonesian Financial Service Authority, the government body that authorizes the compliances of public companies, can enact sanctions on them. The sanctions may be in the form of a warning, penalty fee, businesses termination or withdrawal of business licences. Second, one function of the audit committee is to ensure that financial reports are presented appropriately in accordance with generally accepted accounting principles. To accomplish its functions, the members of the audit committee must have a financial academic and work experience background, which is acceptable to the general public. The audit committee's influence is more significant as it considers the appointment of an external auditor, who verifies transparency and the accountability of companies' annual reports. In this context, the finding suggests that the presence of an audit committee replaces the role of institutional commissioner

alone to increase positive appreciation of investors about practices of corporate governances in the firms.

Regarding the relationship between independent commissioners and firm value, Morck, Shleifer and Vishny (1988) stated that outside board members played an important role in overseeing the managers' performances. The monitoring task was difficult because outside members did not have a personal interest in the firm or control over a large block of votes. They were more reluctant to site poor corporate decisions. Therefore, firm value increased in line with a sufficient proportion of independent commissioners. However, this study shows different results, namely that the presence of independent commissioners in companies listed on the Indonesia Stock Exchange does not affect Tobin's Q. Morck, Shleifer and Vishny (1988) noted this finding and stated that outside board members did not do this function adequately as they often were puppets of top officers.

Among corporate governance measurements, the existence of an audit committee is important to ensure good governance practices, which are seen as essential by important investors (see Model 2.1c). Interestingly, when the audit committee is set as an explanatory variable together with control variables, its role remains the same (Model 2.2c). Both analyses show that the market positively appreciates the presence of audit committee. The results also imply that investors should focus not only the composition of board of directors, but they should also consider EPS and Yield.

Relationship between ownership structure and firm value

Examining the relationships between ownership structure measurements with firm value (Models 3.1a-b and 3.2a-b), in this study it has been found that institutional ownership adversely and significantly affects Tobin's Q, both when the control variables are included or not in multivariate testing. Controlling variables are size, EPS, DAR, and dividend yield. Meanwhile, managerial ownership is significant to determine Tobin's Q only in univariate testing without control variables in the model. Models 3.2a-b show that two controlling variables, size of the firms and dividend yields, are other significant factors that determine firms' value.

It is interesting that in the case of Indonesia, institutional ownership negatively affects firm value as measured by Tobin's Q, meaning that a high percentage of institutional shareowners would decrease the firm value. Investors in the Indonesia Stock Exchange apparently do not positive respond to a high concentrated institutional ownership. This finding is different than those of McConnell and Servaes (1990), Lins (2003), Abdallah and Ismail (2017), which find a significant positive association between Tobin's Q and the percentage of ownership of institutional

investors. Agency theory explains that large shareholders provide an efficient monitoring scheme that leads to a better performance. Abdallah and Ismail (2017) explain that the results of scrutinizing this relationship may vary because a highly concentrated ownership could result in too much interference with management decisions, which, in turn, may hurt the firm's financial performance. A positive relationship between these measurements are possible because of the ability of a highly concentrated ownership to replace weak governance and monitor the managers' action, which then positively affects the financial performance. Instead, this study supports the view taken by Baek, Kang and Park (2004) that a higher ownership concentration leads to a decrease in firm value.

In testing the relationship between managerial ownership and firm value, the results do not support the convergence-of-interest hypothesis that synchronizing managers' interest with outside shareholders' leads to a higher market valuation of the corporation. Convergence-of-interest proposes that when managers hold substantial equity in the firm, and other shareholders are too dispersed to impose value maximization, corporate assets may be deployed to benefit the managers. As managers' interests are similar to outside shareholders, the costs of deviation from value-maximization decline. As a consequence, market value increases along with the growing number of management ownership (Morck, Shleifer and Vishny, 1988). Following the findings, however, the convergence-of-interest hypothesis is not working to explain how to improve firm value through enhancing the role of managerial ownership in Indonesia. Companies in Indonesia, on average, have a low percentage of managerial ownership and high concentration of ownership by institution. Apparently, the current percentages of ownership held by managers are not sufficient to allow the managers take control of the firms' assets and to gain benefits as expected.

Another interesting finding is that institutional ownership affects firm value along with controlling the size and dividend yield. While size has a positive impact, dividend yield has a negative impact on firm value. Findings related to size of the sample are in line with Morck, Shleifer and Vishny (1988), who have also found that the contribution of size is associated with board ownership and market value. The significance of size and dividend yield in Models 3.2a-b shows that the negative relationship between institutional ownership and Tobin's Q is not merely the consequence of negligible or a low percentage of managerial shareholding. Ample reliance on institutional owners to monitor management activities is detrimental to the value of a firm in accordance with the increasing size and the decreasing dividend yield of the firm. The results also prove that leverage and earnings per share do not affect firm value.

To provide robustness to the analysis, the analysis of ownership data and how they relate to the accounting-based firm performance is repeated. Two indicators of firm accounting performance are ROA and ROE. It has been found that institutional ownership has significant influence to ROA positively and ROE negatively, while managerial ownership does not significantly affect ROA and ROE. This implies that institutional ownership in Indonesia has an adequate control mechanism to positively improve return on asset. Combined with positive results between institutional ownership and corporate governance, the institutional investors are able to develop an appropriate monitoring system and then increase return on asset. The negative relationship between institutional ownership and ROE, and lack of relations between managerial ownership and firm accounting performance show that investors do not appreciate high institutional and low percentage of managerial shareholdings. An additional study is required to determine to what extent institutional ownership is able to increase ROE and contrarily, higher percentage of managerial shareholding is sufficient to improve ROA and ROE in Indonesia, as studied by Abdallah and Ismail (2017).

V. CONCLUSION

In the present paper, the relationships between ownership structure, corporate governance and firm value of companies listed on the Indonesia Stock Exchange during the period 2009-2016 are examined. Comprising 425 listed companies and applying standardized regression analysis, the results of this study show that the percentages of institutional and managerial ownership are significant in determining corporate governance measured by the proportion of independent commissioners and the number on members on the board of directors. The existence of large institutional investors represents a better monitoring mechanism, although suggestions to raise the level of managerial ownership tend to conflict with current corporate governance practices. Both institutional and managerial ownership do not affect the presence of an audit committee, as the establishment of this committee is obligatory according to Indonesia Corporate Governance Principles.

The second relationship studied is between corporate governance and firm value. The results show that two measurements of corporate governance, board of directors and the audit committee, are significant in determining the firm value, while an independent commissioner is not meaningful. This implies that investors in Indonesia shun inefficient boards of directors but are secure with the appropriate number of audit committee members. The insignificant relationship between independent commissioners to firm value is probably because of a lack of trust by the general public about the independency of the appointed person.

In testing the third hypothesis, the results show that ownership structure measurements are significant and negatively influence firm value with controlling variables. This implies that investors in the Indonesia Stock Exchange do respond positively to a high concentration of institutional ownership. On the other hand, managerial ownership is not proven to be significant to contribute to efforts to increase a firms' value.

Including controlling variables in the hypothesis testing, this research indicates that size and dividend yield have a significant impact on firm value. Apparently, when the company has large institutional owners that set tight control mechanism on the management, the practices are disadvantageous to firm value, which is the same for increasing the size and decreasing the dividend yield of the firm. The results also prove that leverage and earnings per share do not affect firm value. Using return on assets and return on equity as dependent variables of ownerships structure shows that institutional ownership has an adequate control mechanism to improve return on assets. Further research is required to examine to what extent institutional ownership is needed to increase return on equity, and managerial shareholding is able to improve return on assets and return on equity in Indonesia.

REFERENCES

- Abdallah, Abed Al-Nassar, and Ahmad K. Ismail (2017). Corporate governance practices, ownership structure, and corporate performance in the GCC countries. *Journal of International Financial Markets, Institutions and Money*, vol. 46, pp. 98-115.
- Baek, Jae-Sung, Jun-Koo Kang, and Kyung Suh Park (2004). Corporate governance and firm value: evidence from the Korean financial crisis. *Journal of Financial Economics*, vol. 71, No. 2, pp. 265-313.
- Bai, Chong-En, and others (2003). Corporate governance and market valuation in China. William Davidson Institute Working Paper, No. 564. Michigan: University of Michigan.
- Baker, H. Kent, and Ronald Anderson (2010). An overview of corporate governance. In *Corporate Governance: A Synthesis of Theory, Research, and Practice*, H. Kent Baker and Ronald Anderson, eds. Hoboken, New Jersey: John Wiley and Sons.
- Bauer, Rob, Nadja Guenster, and Roger Otten (2004). Empirical evidence on corporate governance in Europe: the effect on stock returns, firm value and performance. *Journal of Asset Management*, vol. 5, No. 2, pp. 91-104.
- Carter, David A., Betty J. Simkins, and W. Gary Simpson (2003). Corporate governance, board diversity, and firm value. *Financial Review*, vol. 38, No. 1, pp. 33-53.
- Chan, Kam C., and Joanne Li (2008). Audit committee and firm value: evidence on outside top executives as expert-independent directors. *Corporate Governance*, vol. 16, No. 1, pp. 16-31.
- Chen, Sheng-Syan, and Kim Wai Ho (2000). Corporate diversification, ownership structure, and firm value: the Singapore evidence. *International Review of Financial Analysis*, vol. 9, No. 3, pp. 315-326.
- Claessens, Stijn, and Joseph P.H. Fan (2002). Corporate governance in Asia: a survey. *International Review of Finance*, vol. 3, No. 2, pp. 71-103.
- Claessens, Stijn, Simeon Djankov, and Larry H.P. Lang (2000). The separation of ownership and control in East Asian corporations. *Journal of Financial Economics*, vol. 58, No. 1-2, pp. 81-112.
- International Finance Corporation (2014). *The Indonesia Corporate Governance Manual.* Jakarta: International Finance Corporation Advisory Services.
- Jensen, Michael C., and William H. Meckling (1976). Theory of the firm: managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, vol. 3, No. 4, pp. 305-360.
- Lins, Karl V. (2003). Equity ownership and firm value in emerging markets. *Journal of Financial and Quantitative Analysis*, vol. 38, No. 1, pp. 159-186.
- Margaritis, Dimitris, and Maria Psillaki (2010). Capital structure, equity ownership and firm performance. *Journal of Banking & Finance*, vol. 34, No. 2, pp. 621-632.
- McConnell, John J., and Henri Servaes (1990). Additional evidence on equity ownership and corporate value. *Journal of Financial Economy*, vol. 27, No. 2, pp. 595-612.
- Minguez-Vera, Antonio, and Juan Francisco Martin-Ugedo (2007). Does ownership structure affect value? A panel data analysis for the Spanish market. *International Review of Financial Analysis*, vol. 16, No. 1, pp. 81-98.

- Mollah, Sabur, Omar Al Farooque, and Wares Karim (2012). Ownership structure, corporate governance and firm performance: evidence from an African emerging market. Studies in Economics and Finance, vol. 29, No. 4, pp. 301-309.
- Morck, Randall, Andrei Shleifer, and Robert W. Vishny (1988). Management ownership and market valuation. *Journal of Financial Economics*, vol. 20, pp. 293-315.
- Park, Yun W., and Hyun-Han Shin (2004). Board composition and earnings management in Canada. *Journal of Corporate Finance*, vol. 10, No. 3, pp. 431-457.
- Shleifer, Andrei, and Robert W. Vishny (1997). A survey of corporate governance. *The Journal of Finance*, vol. 52, No. 2, pp. 737-783.
- Sikka, Prem, and John Stittle (2017). Debunking the myth of shareholder ownership of companies: some implications for corporate governance and financial reporting. *Critical Perspectives on Accounting*, pp. 1-15.
- Tabalujan, Benny Simon (2002). Family capitalism and corporate governance of family-controlled listed companies in Indonesia. *University of New South Wales Law Journal*, vol. 25, No. 2, pp. 486-515.
- Zhuang, Juzhong, David Edwards, and Ma V. Capulong (2001). Corporate Governance and Finance in East Asia: A Study of Indonesia, Republic of Korea, Malaysia, Philippines, and Thailand. Manila: Asian Development Bank.

ANNEX

Concepts	Proxies	Definition
Firm performance	Tobin's Q (TobinsQ)	Market value to book value of the firm
Ownership variables	Institutional shareholdings (Institutional)	Percentage of shares held by institutions
	Managerial shareholdings (Management)	Percentage of shares held by managers
Corporate governance variables	Independent commissioners (IC)	Proportion of independent commissioners
	Board of directors (BOD)	Number of members of board of directors
	Audit committee (AC)	Number of audit committee
Controlling variables	Earnings per share (EPS)	Earnings after tax/number of outstanding shares
	Debt to asset ratio (DAR)	Total debt/total asset
	Dividend yield (Yield)	
	Return on assets (ROA)	Net profit/total assets
	Return on equity (ROE)	Net profit/shareholders' equity