CORPORATE GOVERNANCE, CAPITAL STRUCTURE AND SHAREHOLDER VALUE OF INDONESIAN STOCK EXCHANGE FIRMS

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Abstrak : Tujuan penelitian ini adalah menilai hubungan antara tata kelola perusahaan dan nilai pemegang saham dengan sturktur modal sebagai mediator. Sampel dalam penelitian ini adalah 231 perusahaan yang terdaftar di Bursa Efek Indonesia untuk periode 2000 – 2012 yang diuji secara empiris. Data panel dinamis dipakai untuk menguji hubungan antara tata kelola perusahaan dan nilai pemegang saham dengan struktur modal sebagai variabel mediasi. Hasil penelitian menunjukkan bahwa komposisi dewan, kepemilikan dewan, kepemilikan institusi dan profitabilitas berpengaruh secara signifikan terhadap nilai pemegang saham (Tobin's q) dengan rasio hutang sebagai variabel mediasi. Penelitian ini memberikan bukti empiris bagi karakteristik dewan dan struktur kepemilikan untuk meningkatkan struktur modal perusahaan dan nilai pemegang saham bagi perusahaan publik di Indonesia dan akan bermanfaat bagi lembaga pembuat keputusan, praktisi bisnis dan akademisi.

Kata kunci: Bursa Efek Indonesia, Tata kelola Perusahaan, Struktur Modal, Tobin's q

INTRODUCTION

Capital structure and corporate governance have succeeded in attracting much research interest. One of the reasons is that when there are good corporate governance practices in the application of capital structure policies then the administration practices of the business entities will be efficient and these provide support for the increase in firms' performance. Good corporate governance practices assist firms to access financing better and at a lower cost (Claessens & Fan, 2002; Liew, 2009), and ensures that boards and managers are accountable. It also assists firms to attract lower cost of financing by increasing investors' confidence (Liew, 2009). Additionally, investors would be willing to pay an extra cost if the company has good governance practices and this helps firms to increase share price (FCGI, 2004)

Meanwhile, boards of directors have been criticized for their role in reducing shareholders value and to some extend resulted in corporate failures. Some of the reasons for the decline in shareholders value are due to board of directors not practicing good governance and instead desire to preserve private benefits more than share value (Black, Jang & Kim, 2006). Nekhili and Cherif (2011) found that a large

number of directors and main shareholders are involved in scandals such as carrying out related party transaction for their own interest. Further, weak corporate governance mechanisms will lead to poor debt management. Firms lose billions of dollars due to poor corporate governance policies and declining share price (Black, 2001) and higher leverage had lead to poor stock price (Mitton, 2002).

In the case of Indonesia, evidence showed that most of Indonesian firms have a low level awareness of practicing good governance and this had caused many deficiencies. Many Indonesian firms are still behind other Asian countries in the implementation of good corporate governance practices and had shown low profitability and higher debt (Sang-Woo Nam, 2004). Forum of Corporate Governance in Indonesia (2004) further showed that as a consequence of the weak governance practices, the Indonesian stock exchange firms caused shows low effectiveness in business decisions with firms having high debt and tendency for default in paying the debt. In addition, from the perceptions of analysts and fund managers, it is of the opinioned that Indonesia performs corporate governance practices relatively poorly (Cheung & Jang, 2008) with some firms become bankrupt. Some of these bankrupt firms involved Indonesian airlines such as Sempati Air (1998), Indonesia Airlines (2003), Adam Air (2008), and the newest being Batavia air in 2013. The main problem involving these Indonesian airlines is attributed to huge debt and bad corporate governance practices.

PROBLEM STATEMENT

Capital structure, corporate governance and the effect on value had been studied for years, but just very few researchers stressed on corporate governance in relation to capital structure and the impact created on shareholder value.

In Indonesia, low level of firm performance could be caused by weak level of corporate governance, but if the firm adopted and implemented corporate governance and the firm performance was still unsatisfactory and low, could it be because of higher levels of debt? Therefore, performance effects of corporate governance especially boards' attributes is simply incomplete without sufficient knowledge of mechanisms to differentiate performance driven values (Van Essen et al., 2012). Since firms can utilize the debt because of the debt's value enhancing this will help the firm with needed capital to support a sum of investment opportunities. Higher independent boards with separate management composition, will perhaps use more leverage because if utilized well will enhance shareholder value. Therefore, firms with good external financing are expected to pursue growth opportunities to create better shareholder value.

Moreover, Kassim, Ishak and Manaf (2013) showed capital structure as important predictors of shareholder value. They suggested that leverage as important examined as a potential mediator for the board process. The mediating variables help to explain board process and firm performance relationship. Board effectivess in affecting the capital structure will influence shareholder value, which results in positive firm performance.

Research findings showed that inverstor were willing to pay a premium for shares of good corporate governance practices for firms. Good corporate governance

is also viewed as an important factor by creditors. Therefore, good corporate governance does matter and contribute a significant value to firms. From agency theory perpectives, the board monitoring function is very important. As the decision making falls to top management, the board should vigously monitor the decision making and firm performance as a whole (Jensen & Meckling, 1976). Wen et al. (2002), Berger & Bonaccorsi di Patti (2006) and Graham et al. (2011) pointed out that corporate governance influences shareholder value through strategic decisions. Decision on capital structure is the essential part of strategies implementation (David, 2008). The cases of some Indonesian Airlines showed the evidences that highly leverage capital structure led to firm failure. Therefore as proposed by Wen et al. (2002), Berger & Bonaccorsi di Patti (2006), David (2008) and Graham et al. (2011) this study will incorporate leverage as mediator variable. The proposal is similar to the recommendation by La Rocca (2007), Van Essen., et al (2012) and Kassim., et al (2013), where it was pointed out that corporate governance, capital structure and shareholder value should be incorporated in a study.

RESEARCH QUESTION

The above discussions lead to the following research question that remains to be answered is: what is the relationship between corporate governance and shareholder value in Indonesian Stock Exchange firms with capital structure as a mediating?

OBJECTIVES OF THE STUDY

This research attempts to accomplish one main objective namely: to examine the relationship between corporate governance and shareholder value with capital structure as a mediating variable.

LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Studies of corporate governance and shareholders value relationship produced mixed results. Prior research established a link between boards' structure and firm performance (Yermack, 1996; Dalton et al., 1998; Abdullah, 2004; Brown & Caylor, 2006; Ghabayen, 2012), including ownership structure and firm performance (Jensen & Meckling, 1976; Bushee, 1998; Uadiale, 2010; Moradi et al., 2012). Other studies also established the same results and found positive relationship (Wen et al., 2002; Claessens & Fan, 2002; Jiraporn et al., 2012; Kajananthan, 2012).

Board governance and ownership structure is expected to improve shareholder value through the effect on firm leverage. The Indonesian 1997 crisis showed that excessive leverage led to firm failure. The evidence seemed to suggest that if the board did not mitigate the risks of having excessive leverage, the company was more likely to suffer (Murphy & Brown, 2009). Increases in leverage, in turn led to lower returns to shareholders. Firms with high dependency on debt financing have to pay fixed borrowing cost and banks tend to charge firms a higher interest rate because of the possibility of defaulting on borrowings being higher. This situation reduces the firms' earning significantly and affects firm performance as a whole. This helps in understanding that firm performance suffers by having ineffective board members who are not able to encourage less risky capital structure

(Johnson, Daily & Ellstrand, 1996). Thus, when directors perform their role effectively, they are expected to influence management to invest in a less risky capital structure (Kassim et al., 2013). Kassim et al. (2013) found that effective independent directors and boards who monitored firm risk vigorously were more likely to monitor management from adopting excessive leverage, which resulted in positive firm performance.

Furthermore, prior research showed that capital structure and firm performance had a positive association. Empirical research found that capital structure could lead to firm performance improvement (Harvey et al., 2004; San & Heng, 2011; Moradi et al., 2012; Onel & Gansuwan, 2012). Board monitoring function is very important from agency theory perspectives. As the decision making falls to top management, the board should vigously monitor the decision making and firm performance as a whole (Jensen & Meckling, 1976). Johnson et al. (1996), Wen et al. (2002), Berger & Bonaccorsi di Patti (2006), and Graham et al. (2011) point out that corporate governance influences strategic decisions namely leverage and thereby influences shareholder value. Decision on capital structure is the essential part of strategies implementation (David, 2008). Therefore as proposed by Johnson et al. (1996), Wen et al. (2002), Berger & Bonaccorsi di Patti (2006), David (2008) and Graham et al. (2011) this study will incorporate leverage as mediator variable. The proposal is similar to the recommendation by La Rocca (2007), Van Essen., et al (2012) and Kassim et al (2013) where it was pointed out that corporate governance, capital structure and shareholder value should be incorporated in a study.

Corporate governance attributes

Board Size

Several studies reported that large board size negatively influences firm performance (Yermack, 1996; Eisenberg, Sundgren & Wells, 1998; De Andres, Azofra & Lopez, 2005). Operating efficiency and CEO performance appear to decline as board size grows. This is because of the disadvantages of worse coordination, flexibility and communication between large board size (De Andres et al., 2005; Tchouassi & Nosseyamba, 2011). Contrary, an analysis by Kiel and Nicholson (2003) found that larger boards have superior performance, because they can more monitor and control organization and the companies have more resources to links with other organizations. Abidin et al. (2009); Uadiale (2010) and Tchouassi & Nosseyamba (2011) findings support this relationship and suggest that board size should be encouraged and composition of outside directors as member of board should be sustained and be increased to enhance corporate financial performance and shareholder value maximization. These results imply that large board size performs effectively.

Board Composition

Empirical evidence of outside directors' performance to increase firm performance is varied. Some of the results showed that higher ROE, profits, dividends and stock repurchase are more likely achieved by higher outside directors than firms with low

external directors (Brown & Caylor, 2006; Abidin et al., 2009). Board processes, decision making by the board, and firm performance may improve, because independent directors possess various backgrounds, attributes, characteristics and expertise for good decision making. Further, Uadiale (2010) argued that the composition of outside directors can monitor and control management thereby increase firm performance. Others results of study such as De Andres et al. (2005) and Moradi et al. (2012) found negative relationship between firm value and board composition. This might be because of weak performance of non executive members that not function well. Erkens et al. (2012) found that firms with more independent boards had worse stock returns than other firms by raising more equity capital during the crisis, which leads to a wealth transfer from existing shareholders to debt holders.

Board Ownership

Managerial shareholding could made shareholders and managers interest aligned. When firm paid out cash dividend, the managers get dividend and benefit of their equity (Jensen & Meckling, 1976). Chen and Chen (2012) argued shareholder will get more benefit from more managerial ownership such as increase their value and reduce agency conflicts. Uadiale (2010) found that directors' stockholding and firms financial performance measures have an inverse sign. Contra findings come from Abidin et al. (2009), they found that the effects of directors' ownership and firms total resources for value added are not confirmed. On average, directors are not motivated by holding equity, perhaps they rewards and benefits are higher than dividend.

Institutional Ownership

Institutional investors tend to influence corporate governance process and are more efficient than individual investor. Increased institutionalization seems to improve the efficiency of governance role in capital market. Higher institutional ownership is associated with significantly better stock price performance (Bushee, 1998; Mitton, 2002). Further support come from Moradi et al. (2012), found that the existence of institutional ownership to firms performance measured by ROI and Tobin's q has a direct effect. The arguement might be that in particular firms' profitability is positively and significantly correlated with institutional shareholders. Institutional investors have an incentives and power to monitor and control management behaviour. On the other hand, Erkens et al. (2012) found that higher institutional ownership had worse stock returns caused larger shareholder losses. This occurred because more risk they took during the crisis.

Control Variables: Firm Size and Profitability

In this research we choose firm size and profitability as a control variable to examine relationship among corporate governance, capital structure and shareholder value, because there are consistent used by many researchers and based on previous literature as factors that may be associated with corporate governance and capital structure and firm value. Firm size and firm performance is positively related

(Kyereboah-Coleman, 2007; Abidin et al., 2009). When firm grow and become bigger with well debt utilization then firm performance will increase. De Andres et al. (2005), found that profitabitlity and corporate governance has a positive relationship.

Corporate Governance, Shareholder Value and Capital Structure as a Mediator

Board monitoring function is very important from agency theory perspectives. As the decision making falls to top management, the board should vigously monitor the decision making and firm performance as a whole (Jensen & Meckling, 1976). Johnson et al. (1996), Wen et al. (2002), Berger & Bonaccorsi di Patti (2006), and Graham et al. (2011) point out that corporate governance influences strategic decisions namely leverage and thereby influences shareholder value. Decision on capital structure is the essential part of strategies implementation (David, 2008).

La Rocca (2007) argues that role of moderation and/or mediation of corporate governance should be considered on the relation between capital structure and firm's value. It is necessary to consider the presence of complementarities between capital structure and corporate governance variables such as: ownership concentration and board of directors.

Van Essen et al. (2012) argue that mediating role of capital structure can be derived from the board role of corporate governance. Performance effects of corporate governance especially boards attributes is simply incomplete without sufficient knowledge of mechanisms that drive performance differences. Since firms can utilize the debt because debt has value enchancing and to help firm with needed capital to support a sum of investment opportunities. Shareholder tends to own firm is likely to shun debt financing. Firms with more independent boards and a separate leadership structure are likely to promote more leverage to create more shareholders value. Therefore, firms with good external financing are expected to pursue investment and better shareholder value.

Intervening or mediating variables between corporate governance and shareholder value could be examined to find out the way and timing of corporate governance in enchancing shareholder value (Van Essen et al., 2012). Kassim et al. (2013) examined the influence of board process to firm performance with capital structure decisions as a mediator. The presence of mediating variable helps to explain board process to firm performance effects. Meanwhile, the effectiveness of board affects capital structure and influences shareholder value. The study found that effective independent directors and boards who monitor firm risk vigorously are more likely to monitor management from adopting excessive leverage, which resulted in positive firm performance.

The cases of some Indonesian Airlines have shown the evidences that highly leverage capital structure lead to firm failure. Therefore as proposed by Johnson et al. (1996), Wen et al. (2002), Berger & Bonaccorsi di Patti (2006); David (2008) and Graham et al. (2011) this study will incorporate leverage as a mediator variable. We focus capital structure as the mediators because prior research showed that capital structure is important predictors of shareholder value.The proposal is similar to the

recommendation by La Rocca (2007), Van Essen et al. (2012) and Kassim et al. (2013). Where the authors point out that corporate governance, capital structure and shareholder value should be incorporated in a study. This leads to hypothesis:

Hypothesis 1: Debt ratio mediates the relationship between board size and shareholder value.

Hypothesis 2: Debt ratio mediates the relationship between board composition and shareholder value.

Hypothesis 3: Debt ratio mediates the relationship between board ownership and shareholder value.

Hypothesis 4: Debt ratio mediates the relationship between institutional ownership and shareholder value.

METHODOLOGY

Sample

Firms' annual reports were samples for this study, published and available in the site of Indonesian stock exchange market and in data stream database for the period 2000-2012. Long periods were better to get more understanding and to cover turbulent periods at the beginning of 2000 as the longer time period would be more volatile giving a full understanding of how corporate governance and debt work over the business cycle and affect overall shareholder value. The sample excluded the firms whose annual report or data were not available. However, firms in the financial services industry, banks, securities, finance institutions and insurance firms were excluded from this study because of the special regulations for these kinds of firms. The hospital industry was excluded too because of the existence of just one firm in this industry.

With 440 firms listed in the Indonesian stock exchange, 358 firms were selected as shown in Table 1. The 82 firms excluded were from the banking, insurance, finance and hospital industries. Finally, from the 358 selected firms, 231 firms were chosen and used in the model because of the availability of data from the year 2000 to 2012.

Table 1. ***Industry Type and Firm Selection***

Industry type	Amount		Availability of data
Advertising, Printing & Media	10	Selected	6
Agricultural, forestry & fishing	21	Selected	12
Insurance	11	Excluded	0
Bank	31	Excluded	0
Finance & investment companies	21	Excluded	0
Hospital	1	Excluded	0
Hotel & tourism	22	Selected	10
Manufacturing	131	Selected	108
Mining & mining services	35	Selected	17
Real estate/construction	54	Selected	28
Securities	18	Excluded	0
Telecommunication	7	Selected	3
Trade & wholesaler	55	Selected	37
Transportation & infrastructure	23	Selected	10
Grand Total	**440**	**358**	**231**

Information relating to shareholder value (Tobin's q), board size, board composition, board ownership, institutional ownership and debt ratio, was collected from firms' annual reports and database that have been determined.

Variables Measurement

This study adopts Tobin's q performance variable to measured shareholder value. Total book value of liabilities and market capitalization divided by total book value of assets is Tobin's q (Brainard & Tobin, 1968). Independent variable are: board size, board composition, board ownership and institutional ownership, are used as the proxy of corporate governance. Following this study, we employ debt ratio as the proxy of capital structure as a mediating variable (Kyereboah-Coleman, 2007; Bokpin, 2010). As a consideration of other omitted variables, control variable is included. As a variable control we used firm size and profitability in order to observe the relationship among corporate governance, capital structure and shareholder value.

Statistical Analysis

Panel data within 13-year period from 2000-2012 is used to examine these relationship. General method moment (GMM) using STATA software is used for the panel data analysis. GMM method provides instruments for board size, board composition, board ownership, institutional ownership and capital structure that are potentially endogenous. We used a dynamic panel data models by GMM approach

which one of the way to obtain consistent estimator of $_Y$ (coefficient) and to handle some missing data and to achived efficiency (Greene, 2002). The Arrellano-Bover/Blundell-Bond with system GMM estimator is used (Arellano & Bond, 1991).

For model specification, we follow with previous literature (Saadah & Prijadi, 2012; Mousavi, Jari & Aliahmadi 2012), we estimate the following multiple regression models:

$CAPS_{it} = a + CG_{it} + CONTROL_{it} + \mu_t$ (1)

$SHV_{it} = a + CAPS_{it} + CONTROL_{it} + \mu_t$ (2)

$SHV_{it} = a + CG_{it} + CONTROL_{it} + \mu_t$ (3)

$SHV_{it} = a + CG_{it} + CAPS_{it} + CONTROL_{it} + \mu_t$ (4)

Where:

$CAPS_{it}$ = the capital structure of firm *i* at time *t*.

CG_{it} = corporate governance variables at time *t*

SHV_{it} = the shareholder value of firm *i* at time *t*.

$CONTROL_{it}$ = control variables at time *t*.

From equations (1,2,3 and 4), the following equations were estimated:

Multiple regression model for corporate governance variables and capital structure variables:

$DR = \alpha + \beta_1 BSize_{it} + \beta_2 BComp_{it} + \beta_3 BOwn_{it} + \beta_4 InstOwn_{it} + \beta_5 Fsize_{it} + \beta_6 Profit_{it} + \mu_{it}$ (5)

Multiple regression model for capital structure variables and shareholder value:

$Tobin's\ q = \alpha + \beta_1 DR_{it} + \beta_2 Fsize_{it} + \beta_3 Profit_{it} + \mu_{it}$ (6)

Multiple regression model for corporate governance variables and shareholder value:

$Tobin's\ q = \alpha + \beta_1 BSize_{it} + \beta_2 BComp_{it} + \beta_3 BOwn_{it} + \beta_4 InstOwn_{it} + \beta_6 Fsize_{it} + \beta_7 Profit_{it} + \mu_{it}$ (7)

Multiple regression model for corporate governance variables, capital structure variables and shareholder value:

$Tobin's\ q = \alpha + \beta_1 BSize_{it} + \beta_2 BComp_{it} + \beta_3 BOwn_{it} + \beta_4 InstOwn_{it} + \beta_5 DR_{it} + \beta_6 Fsize_{it} + \beta_7 Profit_{it} + \mu_{it}$ (8)

Where:

α = intercept coefficient; β_1= coefficient for each of the independent variables

DR= debt ratio; Tobin's q; Bsize= total number of board of directors; Bcomp= number of independent commissioners divided by total number of board of commissioners; Bown= fraction of outstanding shares owned by managers, directors and commissioners; InstOwn= fraction of outstanding shares held by institutional; Firm Size = natural log of annual sales; Profitability = the sum of net profit divided by total assets; μ_{it} = the error term and varies with the individual firm and time.

Mediation Test

To test for mediation, effects must meet four criterias. Firstly, the independent variable must influence the dependent variable. Secondly, the independent variable must influence the presumed mediator. Thirdly, the mediator must influence the dependent variable while controlling the independent variable. Finally, a previously significant relationship between the independent and dependent variables must be reduced in the presence of the mediator (Baron & Kenny, 1986).

According to Baron and Kenny (1986), to establish mediation, the following conditions must hold: the independent variable must affect the mediator in the first equation; the independent variable must be shown to affect the dependent variable in the second equation; and the mediator must affect the dependent variable in the third equation. If these conditions all hold in the predicted direction, then the effect of the independent variable on the dependent variable must be less in the third equation than in the second equation. Perfect or full mediation holds if the independent variable has no effect when the mediator is controlled. Partial mediation holds, if independent variable still has the effect or significance when the mediator is controlled.

Further, it is possible for the independent variable to have smaller coefficients when it alone predicts the dependent variable or direct relationship than when it and the mediator are in the equation (indirect relationship) but the larger coeeficient is not significant and the smaller one is significant. Baron and Kenny (1986) claimed that mediation is strongest when there is an indirect effect but not direct effect in equation 3. But the strength of mediation should be measured by the size of the indirect effect, not by the lack of the direct effect. The presence of the direct effect can inform the theorizing of other mediators. According to Zhao, John, Lynch and Chen (2010) there need not be a significant effect to be mediated in equation 2. There should be only one requirement to establish mediation, that indirect effect α x β is significant.

To establish mediation, Baron and Kenny's three equations are useful, but this is not because one must pass any of their tests. Regression equation 1 and 3 estimate the parameters α and β used to test the indirect effect. But it is distribution of their product that matters. Therefore, we also applied product of the coefficient method to recheck the mediation effect, if we found from Baron and Kenny (1986), the direct coefficient is increased not reduced and still have significant effect when debt ratio was controlled. We applied Sobel's formula , with the equation :$SE\alpha\beta = SQRT\ \alpha^2 \sigma^2_{\beta} + \beta^2 \sigma^2_{\alpha} + \sigma^2_{\alpha} \sigma^2_{\beta}$; z test= $\alpha\beta$/ $SE\alpha\beta$ (Sobel, 1982). If the z test was > than +-1.96 then it would be concluded that the model had the mediation. If either α or β was not significant, there was said to be no mediation. If 1-3 held, we could conclude that there was partial mediation. If 1-3 held and c^1 was not significantly different from zero, the effect was said to be perfect or full mediation.

DATA ANALYSIS AND FINDINGS

Descriptive Statistics of Variables

The descriptive statistic for the dependent variables, independent variables and control variables are shown in Table 4.1. It reports the mean and standard deviation of the variables used in the study as well as the number of firm year observations

over the sample period. The mean of Tobin's q is 0.96, this book value and market capitalization of the firms is lower than its assets, and this encourage firms to invest less in capital because the market value of assets are worth less than the price firms paid for them.

The mean for leverage (debt ratio) from the sample is 0.6108. This number reveals that an average of 61.08 percent of the firms assets were financed through funds raised from debt. This implies that most of the firm use debt as the major source of funds (Myers, 2001; Saadah & Prijadi, 2012).

Table 2. Descriptive Statistics of Variables

Variable	Mean	Std. Dev.	Min	Max
TobinsQ	0.9590	1.8248	-0.75643	49.4084
DR	0.6108	0.5179	-0.5432	8.2450
Firmsize	11.7118	1.0966	0	14.2743
Profitability	0.0318	0.2718	-9.8778	4.6844
Bsize	4.5986	1.9312	1	14.00
Bcomp	0.3084	0.1867	0	1.00
Bowns	0.0187	0.0551	0	0.6389
Instown	0.6753	0.2110	0	1.00

The descriptive statistics of corporate structure showed that on an average, a board has 5 directors. Meanwhile, board commissioner on average is 30.84 percent. Based on code for good corporate governance, depending on the specific characteristics of a firm, at least 20 percent of the members of board commissioner should fall under the category of outside member. In terms of ownership structure, it is found that the average percentage of shares held by board is only 1.87 percent. Though it is widely accepted that the shareholding of board may increase their commitment toward organization, the descriptive statictics showed that this is still not been established among Indonesian public listed firms. As such, the low level of board ownership corresponded to the high ownership by institutional. Interestingly, the average percentage owned by institutional is 67.53 percent, suggesting that the dominant shareholder of Indonesian firms are institutions.

Correlation Analysis

Table 3 reports the Pearson correlation coefficients for the firm, shareholder value, and capital structure and governance variables. The correlations among variables are generally low, suggesting that each governance variable is a stand alone element and not highly correlated.

Table 3. Correlation Matrix

	Tobins Q	DR	Firm size	Profit	Bsize	Bcomp	Bowns	Instown
TobinsQ	1.000							
DR	0.306*	1.000						
Firm size	-0.003	-0.041*	1.000					
Profit	-0.284*	-0.267*	0.166*	1.000				
Bsize	0.031	-0.077*	0.434*	0.108*	1.000			
Bcomp	0.023	-0.008	0.101*	0.022	0.052*	1.000		
Bowns	-0.089*	-0.047*	-0.089*	0.03	-0.118*	-0.052*	1.000	
Instown	0.051*	-0.030	0.001	0.058*	0.087*	-0.058*	-0.278*	1.000

* significant at α = 0.05; ** significant at α = 0.01; *** significant at α = 0.001

Regression Results between Corporate Governance and Shareholder Value with Capital Structure as a Mediator

Multicolinearity test is also carried out. As a rule of thumb, if the tolerance value of more than 0.10 and variance inflation factor (VIF) of less than 10 indicated no serious collinearity problem (Gujarati, 2003). The test shows no serious multicollinearity exist among the independent variables, mediating variable and control variables. The test indicated that there is no evidence of multicolinearity since the VIF values are between the range of 1.03 and 1.34 with mean VIF 1.14.

Table 4 to Table 5 showed the analysis of mediation effects of capital structure on the relationship between corporate governance and shareholder value. As suggested by Baron and Kenny (1986), mediation regression analysis needs to go through three steps. Perfect or full mediation holds if the independent variable has no effect when the mediator is controlled. Partial mediation holds, if independent variable still has the effect or significant when the mediator is controlled. Further, it is possible for the independent variable to have smaller coefficients when it alone predicts the dependent variable or direct relationship than when it and the mediator are in the equation (indirect relationship). According to Zhao, John, Lynch, & Chen (2010) there need not be a significant effect to be mediated in equation 2. To establish mediation, Baron and Kenny's there equations are useful, but this is not because one must pass any of their test. Therefore, we also apply product of coefficient method (Sobel, 1982) to recheck the mediaton effect. If the Z test is > than 1.96 then it is concluded that the model has the mediation.

The relationship between corporate governance and capital structure in step 1 shows that board composition, board ownership, institutional ownership and profitability have a significant effect to debt ratio. While, the result in step 2 shows that there is a significant relationship between corporate governance and shareholder value, therefore we can proceed to step 3. The relationship between corporate governance, Tobin's q and capital structure as a mediator as shown in step 3.

Table 4. Regression results of Corporate Governance and Capital Structure (step 1)

Number of obs = 2744 Wald chi2 (15) = 3047.1 Prob > chi2 = 0.0000				
DR	Coeff.	Std err	t-stat	Sig.
DR L1	0.4889***	0.010	49.72	0.000
Bsize	-0.0022	0.002	-0.89	0.372
Bcomp	-0.1046***	0.014	-7.74	0.000
Bowns	-0.1878	0.124	-1.52	0.130
Instown	-0.2101***	0.032	-6.65	0.000
Firm size	-0.0002	0.003	-0.08	0.938
Profitability	-0.3136***	0.009	-36.6	0.000
Constant	0.4776***	0.047	-10.08	0.000

* significant at $\alpha = 0.05$; ** significant at $\alpha = 0.01$; *** significant at $\alpha = 0.001$

Table 4.5 shows that debt level does not mediate the relationship between board size and Tobin's q. Since board size still has no significant relationship with Tobin's q and Z test is less than 1.96 when the company debt is controlled, the result shows that there is no mediation effect of firm leverage, suggesting that board size have no effects on Tobin's q when firm leverage is included.

Debt ratio mediates the relationship between board composition and Tobin's q. Comparing unstandardized coefficients for board composition (unstandardized coefficients = 0.3258) and related directly to Tobin's q. After mediating by debt the unstandardized coefficients increases to 0.7198 for board composition and become significant with t-value= 9.410. The significant value in board composition changes from significant to significant, unstandardized coefficient increased after the firm debt has been controlled and the results of Z test is 5.04 > 1.96 (Table 4.5), indicates the partial mediation of firm leverage.

Debt ratio mediates the relationship between board ownership and Tobin's q. Turning the unstandardized coefficients from -1.5139 to -1.8157, from negative significant in direct relationship to negative significant in indirect relationship (t-value=-3.010 to t-value -2.920) and Z test is -2.9985>- 1.96 with presence of debt

ratio as a mediating variable between board ownership and Tobin's q, indicates the partial mediation of firm leverage.

Table 5. Regression results of Corporate Governance, Tobin's q (step 2)

Number of obs = 2744
Wald chi2 (15) = 16373.88
Prob > chi2 = 0.0000
Tobin's Q

	Coeff.	Std err	t-stat	Sig.
TobinsQ L1	0.2641***	0.003	87.22	0.000
Bsize	-0.0097	0.011	-0.90	0.367
Bcomp	0.3258***	0.064	5.11	0.000
Bowns	-1.5139**	0.503	-3.01	0.003
Instown	0.8261***	0.117	7.08	0.000
Firm size	-0.0270*	0.012	-2.29	0.022
Profitability	-2.371***	0.174	-31.85	0.000
Constant	0.4276**	0.163	2.62	0.009

* significant at α = 0.05; ** significant at α = 0.01; *** significant at α = 0.001

Using debt as mediating variable onto the relationship between institutional ownership and shareholder value shows a positive relationship. From significant to higher positive significant with the presence of debt ratio (t-value=7.080 and t-value=7.520). Unstandardized coefficients changed from 0.8261 to 0.9860 and Z test is 6.9305 > 1.96. Higher institutional ownership shows an increase in shareholder value if leverage is increased. Increase in institutional ownership will increase shareholder value with the presence of debt ratio with higher value that is 0.50. Since the significant for the institutional ownership changed when the company debt is controlled, the result shows that there is a partial mediation effect of firm leverage.

Table 6. Analysis of Corporate Governance and Tobin's q with Capital Structure as a Mediator (step 3)

Number of obs = 2744
Wald chi2 (16) = 11582.3
Prob > chi2 = 0.0000

Tobin's Q	Direct Coef.	Indirect Coef.	Direct t	Indirect t	Z test	Conclusion
Tobin's Q L1		0.2421***	87.220	60.320		
Bsize	-.0097	-0.011***	-0.900	-0.920	-0.8812	Not supported
Bcomp	0.3258***	0.7198***	5.110	9.410	5.0403	Partial mediation
Bowns	-1.5139***	-1.8157**	-3.010	-2.920	-2.9985	Partial mediation
Instown	0.8261***	0.9860***	7.080	7.520	6.9305	Partial mediation
DR	1.7579***	1.8164***	36.78	32.600		
Firm size	-0.0270***	-0.0471***	-2.290	-4.280	1.2931	Not supported
Profitability	-2.371***	-1.9425***	-31.850	-28.550	12.3074	partial mediation
Constant	0.4276**	-0.6688***	2.620	-3.600		

* significant at α = 0.05; ** significant at α = 0.01; *** significant at α = 0.001

Using debt as mediating variable onto the relationship between firm size and Tobin's q shows a negative relationship. Since the z test less then 1.96 when the company debt is controlled, the result shows that there is no mediation effect of firm leverage, suggesting that firm size has no effects on Tobin's q even when firm leverage is included. Debt mediates the relationship between profitability and Tobin's q. Since the significant for the profitability changed when the company debt is controlled and the z test is higher than 1.96, the result shows that there is a partial mediation effect of firm leverage.

Overall, debt ratio as a mediating variable for the relationship between corporate governance and shareholder value is consistent with the study of Van Essen et al., 2012 and Kassim et al., 2013. The effectiveness of corporate governance variables in influencing the capital structure will influence shareholder value.

DISCUSSION AND CONCLUSIONS

This study indicates that Indonesian listed firms practice higher debt policy with higher institutional ownership and yet shows low profitability. The result showed that board size and firm size do not affect Tobin's q when level of debt is used as a mediator. The result implies that larger board would not be advantageous for the firms because they could not perform effectively and could not utilize leverage well to increase shareholder value. Board composition, board ownership, institutional ownership and profitability affect the Tobin's q when level of debt is used as a mediator. The result indicates that the effective board independent influences management to adopt lower leverage, which in turn enhances shareholder value. The independent board monitors managers more actively, causing these managers to adopt lower leverage to avoid performance pressures associated with the commitments to disgorge large amount of cash (Jensen, 1986). Managers who face stronger board independent might pursue lower debt levels to avoid extra risk associated with higher leverage (Wen et al., 2002). Vigorous monitoring by the board tends to put pressure on management, causing the manager to be more prudent in decision makings. This in turn, brings positive effect to company capital structure decisions and performance (Kassim et al., 2013). These help to explain how effective independent boards are able to influence shareholder value by encouraging less risky capital structure.

In addition, the results indicate that board ownership and institutional shareholder influences management to adopt lower leverage, which in turn enhances shareholder value. Institutional shareholder regulates actively so as to avoid receiving interest debt (Rezaei et al., 2012). Moreover, firms with high leverage ratios provide a negative signal that the firm faces a future of financial difficulties. It implies that firms which have a large proportion of board and institutional investors are less likely to meet their financing needs using debt. This helps to explain how effective board ownership and institutional shareholders are able to influence shareholder value by encouraging less risky capital structure. Further, increase in profitability will decrease shareholder value lower than without leverage.

Based on this result, investor should invest into a company with larger proportion of board composition, larger board ownership and larger proportion of institutional ownership. Investors should be aware of the importance of changing corporate governance impact on shareholder value. On the other hand, investor who does not like to take risk should invest into a company with a small board size. Increase in firm size and profitability will decrease shareholder value, lower than without leverage. An investor should put his money to a company with a large asset. Besides that, a company with a high profitability attracts more investors and tends to lower the investors riskiness.

This study has some limitations namely: a sample of 231 publicly traded Indonesian and established firms for period 2000 till 2012 is used in this study. Therefore the results only apply to firms that have survived for a long time. This restricts the range of phenomenon studied. The study only examined corporate governance practices variables from internal factors and not from external factors. Besides that this study only examined capital structure as a mediator for corporate governance and shareholder value. Further studies could also enchance corporate governance variables from other internal variables such as bad financial conditions and external such as investment opportunity and also corporate governance as a mediator and/or moderator for the relationship between capital structure and shareholder value might make the study more comprehensive.

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