

RESEARCH ARTICLE

The Mediating Role of Dividend Policy on the Impact of Capital Structure and Corporate Governance Mechanisms on Firm Value Among Publicly Listed Companies in the Philippines

Franklin S. Ramirez
De La Salle University–Manila

Rodiel C. Ferrer
De La Salle University–Manila
rodiel.ferrer@dlsu.edu.ph

The mediating role of dividend policy on the impact of capital structure and corporate governance mechanisms on firm value was studied in this research. This study was conducted using the panel data of nonfinancial firms that were drawn from the firm's financial statements and annual corporate governance report. The data were deracinated from the OSIRIS database, company website, and PSE Edge that were listed on the Philippine Stock Exchange for the years 2013 to 2016. To analyze the full model, the partial least squares–structural equation modeling approach was used with the statistical significance level of 0.05.

With this, findings denuded that capital structure, the board size, and CEO duality have a negative significant effect, whereas executive compensation has a positive significant effect, both relating to firm value. However, board independence and institutional ownership have a positive but not significant effect on firm value. It was also ascertained that the impact of capital structure and corporate governance mechanisms on firm value was not mediated by dividend policy. These infer that markets are imperfect and firms do follow specific payout policies to enhance their value. Market factors such as legal, taxation, issuance cost, and informational asymmetry among investors, managers, and shareholders as well as different degrees of rationalization or psychological behaviors affect how dividend payment becomes a significant factor in increasing or decreasing firm value.

Keywords: *capital structure, corporate governance, dividend policy, firm value*

JEL Classification: M10, M20 and M30

Over the past decades, corporate governance infatuated countless discussions; this is due to various notable corporate transgressions and collapses that involved unscrupulous business practices. The choice of dividend policy or the pronouncement of the firm's earnings that should be redistributed to shareholders is one of the corporate governance policies that predisposes the firm's operations (Baker et al., 2011). Correia da Silva et al. (2004) articulated that dividends do not only function as an underlying instrument in assessing the firm's prospects under asymmetric information because in certain cases, it can also serve as a corporate governance tool that can solve the agency problem emanated from the management and shareholders' differing interest. As a result, companies with high corporate governance scores received higher shareholder satisfaction to which high dividends will pay. On the other hand, not all of this effect was beneficial to companies; some contemporary studies postulated that higher corporate governance scores result in low dividend payments (Smith et al., 2008).

With these varying perspectives, dividends can either solve or complicate the agency problem due to their ability to become a substitute or a shield for a weak governance system. Thus, looking at how it will function in explaining the effect of corporate governance mechanisms on firm value will help to understand and validate its real implications especially in addressing agency problems, as well as its role in promoting shareholders' value.

Another important factor that may impact firm value is the concept of capital structure. If a firm uses different levels of leverage, control over the enterprise was affected, and as a consequence, it affects the dividend policy. Faulkender and Milbourn (2006) concluded that decisions regarding financial policy are based conjointly upon capital structure design and setting dividend policy. Therefore, determining the role of dividend policy in aligning the interest of the shareholders/creditors to those with the management will help to recognize its practical connection in assessing the optimal mix of capital structure to be employed and its eventual effect in maximizing the value of the firm.

Thus, with these intriguing relationships, the researchers examine and analyze the mediating role of dividend policy in explaining the impact of capital structure and corporate governance mechanisms on firm value in the Philippine context.

Theoretical Frameworks

The different theoretical and conceptual bases to formulate the operational framework that strengthens this study are the following set of theories:

Agency Theory—Managers view dividends as a tool to reduce agency costs while corporate governance implies adequate monitoring mechanisms to be established to protect shareholders from management's conflict of interest. This concludes that this theory is concerned with aligning the interests of owners and managers (Jensen & Meckling, 1976).

Stewardship Theory—In this theory, managers are essential trustworthy individuals and are good stewards of the resources entrusted to them (Davis et al., 1997). This means that this theory supports the structures that are geared towards facilitating and empowering rather than monitoring and control (Davis et al., 1997).

Free Cash Flow Theory—This was principally based on the contention that there was a conflict of interest between owners and managers, and for this reason, excess cash can create overinvestment problems since it may be used to fund negative net present value (NPV) projects (Jensen & Meckling, 1976). By these, firms can mitigate the agency cost of free cash flows by paying dividends and/or repurchasing shares that will result in a favorable stock market reaction because it is an indication to shareholders that management will not lavishly use corporate cash. (Jensen, 2005).

Operational Framework

Using the documented frameworks discussed above, this paper aims to investigate the mediating role of dividend policy in explaining the impact of capital structure and corporate governance mechanisms on firm value. Figure 1 illustrates the structural equation model used in this study.

This study used partial least squares–structural equation modeling (PLS-SEM) because there are observed and latent variables involved to analyze the effects between capital structure, corporate governance mechanisms, dividend policy, and firm value. The use of PLS-SEM allows researchers to generate a good structural model especially when the sample size is small, there is limited assumption on data distribution, there is limited available theory, and accurate model

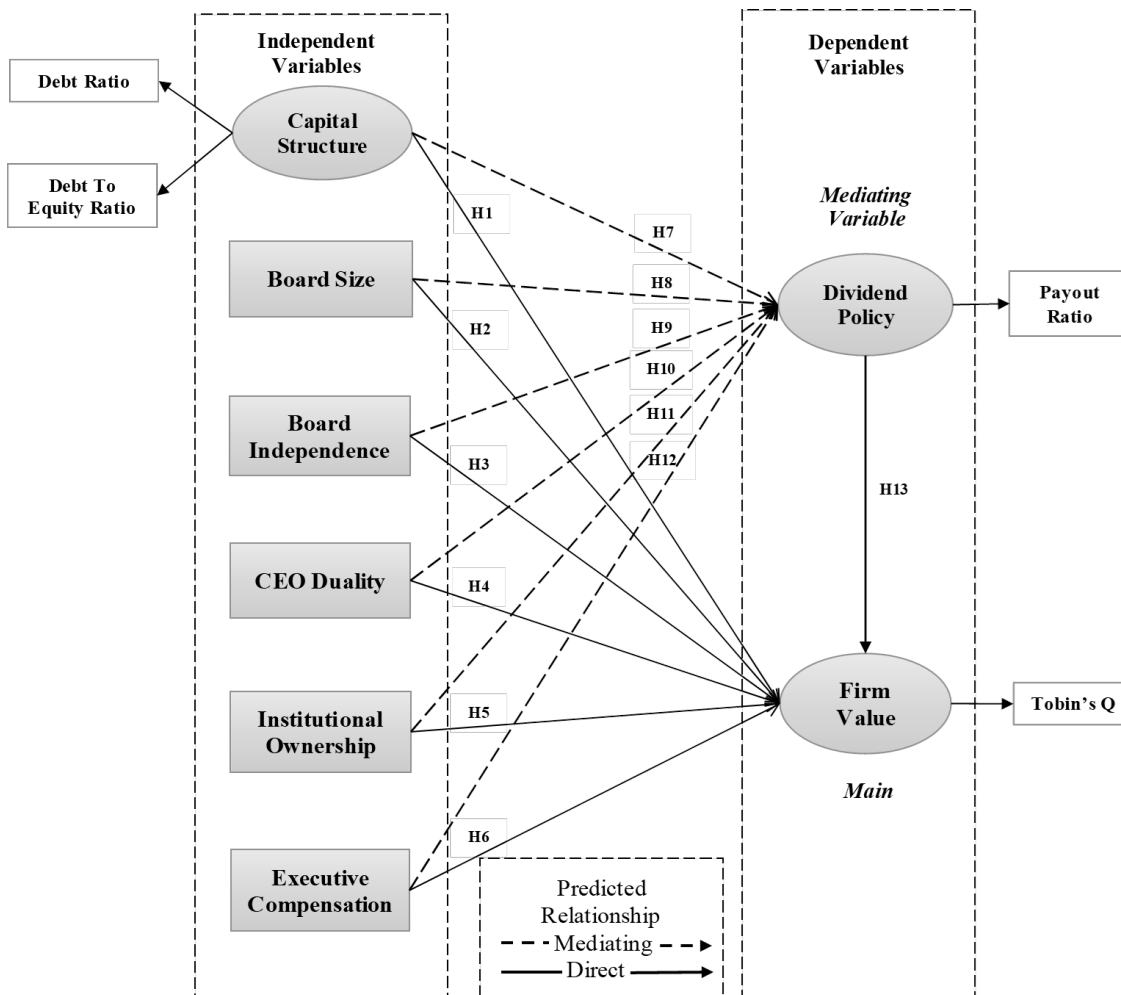


Figure 1. Schematic diagram of operational framework using structural equation model.

specification cannot be ensured (Hwang et al., 2010; Wong, 2010). As seen in Figure 1, there are three latent variables—capital structure (CS), dividend policy (DP), and firm value (FV). The latent variables are indicated by the observed variables (indicators)—debt ratio (DR) and debt-to-equity ratio (DER) are the indicators of the latent variable capital structure (CS); payout ratio (PR) represents dividend policy (DP); Tobin’s Q represents the firm value (FV) while board size (BS), board independence (BI), CEO duality (CEOD), institutional ownership (IO), and executive compensation (EC) are used separately to analyze its effect on firm value.

Capital structure and corporate governance were two very important factors for the growth of the firm. But both the growth of the company and higher dividend distribution conflicted. So, the dividend decision must be taken considering wealth maximization objectives.

Concept of Corporate Governance

As the main focus of this study, corporate governance is defined by the Institute of Corporate Directors (ICD) as “the system by which companies are directed and controlled by a board of directors, acting collegially.” In a general context, Bhagat and Bolton (2019) stated that the theory of corporate governance addresses the relationship between owners, the firm’s managers, and other stakeholders such as customers and governments. This touches the board structure, the ownership structure, and the executive compensation that were considered as critical corporate governance measures investigated in this study. These three key areas of corporate governance are the most relevant to firm value. In the Philippines, the Securities and Exchange Commission (SEC) has provided initiative efforts promoting good corporate governance through SEC Memorandum Circular No 2, Series of 2002,

which stated the Code of Corporate Governance and was issued on April 5, 2002. Further, the SEC released a new Code of Corporate Governance for Publicly Listed Companies to align the Organisation for Economic Co-operation and Development (OECD) global best practices and ASEAN Corporate Governance, released last November 22, 2016.

The board structure is the first area of corporate governance that is used to reduce agency problems. This is relevant to corporate governance as some of its key aspects provide monitoring and bonding costs. For instance, boards, for some companies, are made up of inside directors or independent directors that are not related to the firm (Adams et al., 2010). Also, if the CEO acts jointly as chairman, this falls into another aspect of board structure, the CEO–chairman duality. This situation allows the CEO to have more control over the firm, which creates a negative or a positive effect (Adams et al., 2010). Therefore, it was considered as one of the mechanisms that can lead to good or weak corporate governance.

Another important feature of good governance is the ownership structure that relates to the degree of ownership allocation over the firm (Desender, 2011). This should be considered as an aspect of corporate governance especially when there was an existence of large or institutional investors. Large investors may differ in interests from small investors and may also have more influence on a firm operation (Al-Gharaibeh, 2013; Desender, 2011). Therefore, the ownership structure is also an important aspect of governance that can trigger a positive or negative effect on firm value.

Lastly, executive compensation is an aspect of corporate governance that indicates an association between bonding costs and the agency problem (Minnick & Rosenthal, 2014; Shapiro, 2005). However, this arrangement is not always effective in reducing agency costs; as a result, the approach to executive compensation in solving agency problems was both a serious aspect of corporate governance and a problematic one in the explanation of its effect on firm value.

Hypotheses of the Study

This study hypothesized direct and mediating effects discussed in the following subsections.

Direct Effect of Capital Structure on Firm Value

One of the primary questions in finance that has been studied extensively is the impact of leverage on firm value. Mougoué and Mukherjee (1994) and Qureshi and Azid (2006) noted that to maximize the value of the company, there should be an integration of all financial management decisions, which included investments decisions, financing, and dividend policy. Different studies presented evidence showing that there were notable differences in leverage ratios for firms across the developed countries, and these differences were partly due to financing behavior differences. Cuong and Canh (2012) tested the relation between capital structure design and its impact on firm value among 92 of Vietnam's seafood processing enterprises from 2005 to 2010 and discovered that there was a negative correlation between the two. Similarly, Hartanti et al. (2019) concluded that capital structure has a negative but not significant effect on company value. Further, Van Khanh et al. (2020) showed that leverage measured as total debt over total assets has a negative significant effect on firm value.

Meanwhile, studies found a positive significant link between capital structure and the company's firm value (Abbasi et al., 2012; Qureshi & Azid, 2006; Salim & Yadav, 2012; Sudiyatno et al., 2012), while Uzliawati et al. (2018) verified that there was a positive correlation but not significant effect between debt-to-equity ratio (DER) and long-term debt-to-asset ratio (LDAR) to firm value among 101 manufacturing companies listed in the Indonesian Stock Exchange during the period 2012–2015. Attributable to conflicting results of previous studies, this study documented its first hypothesis as follows:

H_{a1} : *Capital structure has a significant impact on firm value.*

Direct Effect of Board Size on Firm Value

The first mechanism studied for corporate governance was board size. Evidence showed that there were conflicting results between board size and firm value. Yermack (1996) studied a sample of 452 big industrial companies in the United States and concluded that a significant negative relationship between board size and firm value exists. In contrast, other studies noted a positive relationship between board size and firm value (Adams et al., 2010; Bhagat & Bolton, 2019; Van Khanh et al., 2020). These studies

concluded that increasing the size of the board results in increased firm value because of the generated collective knowledge and accurate decisions from different perspectives and consultations. Due to this intriguing relationship of board size on firm value, this study established its second hypothesis as follows:

Ha₂: Board size has a significant impact on firm value.

Direct Effect of Board Independence on Firm Value

In a corporate setting, a board is normally composed of external and internal directors. Fama and Jensen (1983) discovered that most of the internal directors, by their level of position, are more likely to commit collusion with the management. Oppositely, other studies investigated the proportion of independent directors in maximizing the performance and growth of the firm, and the result showed that it significantly decreases short-term performance and firm value (Bhagat & Bolton, 2019; Dah et al., 2012).

Van Khanh et al. (2020) applied different regression methods of Fixed Effect Model (FEM), Random Effect Model (REM), Generalized Least Squares (GLS), and Generalized Method of Moment (GMM) to reduced model limitations, using the data collected at enterprises listed on the stock market in Vietnam over the period 2008–2018, with 2,937 observations. Their study found out that board independence has a positive but not significant effect on firm value.

Abbasi et al. (2012) also examined the influence of board independence on firm value using only those under the food sector in the Tehran Stock Exchange (TSE) and discovered that board independence greatly works as a mechanism in reducing agency problem because of its known significant and positive effect on a company's value. Due to such an unsettling effect of board independence on firm value, this third hypothesis is hereby proposed as follows:

Ha₃: Board independence has a significant impact on firm value.

Direct Effect of CEO Duality on Firm Value

Theoretically, CEO duality reduces the magnitude of control possessed by the board and therefore elevates the CEO's control that can negatively affect the company's performance. Other studies supported the stewardship theory and concluded that CEO duality

positively affects the performance of the company (Davis et al., 1997). On the contrary, when a single person assumed the role of a chairman and CEO, the board as a mechanism to reduce agency cost will now become inoperable, resulting in an imminent decline in the company's performance (Fama & Jensen, 1983; Jensen & Meckling, 1976). Other studies suggested that CEO duality has a negative but not significant effect on firm value (Van Khanh et al., 2020).

Furthermore, Abbasi et al. (2012) found that CEO duality seems to be inapplicable to Iranian food industry firms since it has a positive and statistically significant effect on firm value. This makes evidence inconclusive for CEO duality, in which a person holds two positions, CEO and chairman. Nonetheless, the impact of CEO duality on firm value should be tested in any case due to its known importance. Due to conflicting results from different studies, the researchers arrived on this fourth hypothesis:

Ha₄: CEO duality has a significant impact on firm value.

Direct Effect of Institutional Ownership on Firm Value

The level of ownership controlled by institutional investors like foundation or investment funds can function as a mechanism to reduce the level of information asymmetry between the owners and managers; in short, information about the organization is available to all investors so that decisions can be made to align in maximizing firm value (Bhattacharya, 1979). Hartanti et al. (2019) investigated the effect of institutional ownership on firm value among those companies registered in the LQ-45 that are listed on the Indonesia Stock Exchange for the period 2015–2017 and concluded that it has a positive but not significant effect on firm value due to constant institutional ownership from period to period.

Moreover, Abbasi et al. (2012) made use of generalized least squares (GLS) in analyzing the effects of certain corporate governance mechanisms on firm value in the TSE from 2002 to 2011. Their study posited that institutional ownership has a positive and statistically significant effect on firm value. With these varying results, there was enough evidence to establish the fifth hypothesis as follows:

Ha₅: Institutional ownership has a significant impact on firm value.

Direct Effect of Executive Compensation on Firm Value

There is a shred of evidence that current practices, such as the use of compensation, do not succeed in aligning the firm's and the manager's interests without introducing appropriate levels of risk, which makes CEO compensation a controversial area of corporate governance (Bicksler, 2008). It was indicated in agency theory that there is an unsuccessful bonding attempt that continues to allow misaligned incentives between the principal and agent that resulted in a negative impact of executive compensation on firm value (Jensen & Meckling, 1976).

Dah et al. (2012) examined the effect of CEO equity-based compensation on firm value from 1994 to 2009, and they revealed that CEO equity-based compensation has a significant positive effect on firm value. This supported the applicability of equity-based compensation as an incentive or motivational mechanism in reducing conflict of interest among managers and shareholders.

Further, using secondary data from the Nigerian stock exchange, Umobong and Bele-Egberi's (2019) result differs from those of previous studies. The result showed that profit sharing as a form of performance compensation does not have a significant effect on enterprise value and market capitalization while bonuses exhibited no significant effect on the price-to-book ratio and enterprise value. Also, this study found a significant relationship between bonuses and market capitalization and a significant relationship between profit sharing and price-to-book value. Collectively, emphasis on delayed promotion, long hours of work, a meaningless job, poor job tenure, and poor job environment becomes the paramount reason Nigerian banks are not motivated to enhance company value. Nevertheless, this will turn otherwise if CEO compensation can be a significant factor in influencing firm value. To determine if it is a significant or insignificant factor, the sixth hypothesis was established as follows:

Ha₆: *Executive compensation has a significant impact on firm value.*

Mediating Effect of Dividend Policy on the Impact of Capital Structure on Firm Value

Capital structure theory explained that capital structure is an imperative topic because the poor

capital structure will have unswerving effects on the financial status of the firm, which in turn will affect the firm's future prospect. This can only be achieved if all financial management decisions, which include financing, investment, and dividend policy, have been taken into account in profit maximization (Mougoué & Mukherjee, 1994; Qureshi & Azid, 2006). Further, Jensen and Meckling (1976) stated that the basis of dividend policy as a problematic issue is the presence of information asymmetry between managers and shareholders. This argument is based on the notion that managers may behave opportunistically by allowing dividends to function as a good signal of future performance. Thus, determining its role in order to recognize its real effects will help us understand the optimal mix of capital structure to be employed that will maximize the value of the firm. In this way, the study documented its seventh hypothesis as follows:

Ha₇: *Capital structure has a significant effect on firm value through dividend policy.*

Mediating Effect of Dividend Policy on the Impact of Board Size on Firm Value

Board size was the first mechanism studied for corporate governance; hence, there are conflicting findings in the literature on board size (Adams et al., 2010; Bhagat & Bolton, 2019; Van Khanh et al., 2020; Yermack, 1996). While some studies suggested a larger board promotes higher dividend payments (Dutta & Chang, 2012; Muhammad Sadiq Shahid et al., 2016), other studies suggested otherwise that this may affect negatively (Malavia Mardani et al., 2018). For some studies, this relationship did not result to a significant effect (Al-Kahmisi et al., 2018). Therefore, it is essential to understand how dividend policy functions as a buffer in explaining the concept of a larger or lesser board size in contributing to good corporate governance. The hypothesis of this relationship was established as follows:

Ha₈: *Board size has a significant effect on firm value through dividend policy.*

Mediating Effect of Dividend Policy on the Impact of Board Independence on Firm Value

Although the association between board independence that works as monitoring control in the board and firm value has been extensively researched,

there were no congruent points of view towards the sense of the relation between the monitoring role exerted by outside directors and its effect on firm value through dividend policy in the Philippine context (Fama & Jensen, 1983; Jensen & Meckling, 1976). Some studies noted that board independence does not have an effect on dividend payouts (Muhammad Sadiq Shahid et al., 2016), while others concluded a negative significant effect (Al-Kahmisi et al., 2018). On the other hand, Malavia Mardani et al. (2018) found out that an increase in the number of independent directors will encourage the majority to pay higher dividends as explained by its positive significant effect. Based on these considerations, this study documented its ninth hypothesis as follows:

Ha₉: *Board independence has a significant effect on firm value through dividend policy.*

Mediating Effect of Dividend Policy on the Impact of CEO Duality on Firm Value

CEO duality can be an indicator of either weak or good corporate governance, which is likely to increase dividend payments, or firm owners see managers as good and productive stewards that serve firms in their best interest. However, this created the dilemma of whether CEO duality affects firm value positively or negatively through dividend policy. Numerous authors examined the impact of CEO duality on dividend payment (Al-Kahmisi et al., 2018); others also noted that it does not influence firm value (Muhammad Sadiq Shahid et al., 2016). Hence, there was no clear argument from the literature that entails a significant effect of CEO duality on firm value. Therefore, the following hypothesis was proposed for testing:

Ha₁₀: *CEO duality has a significant effect on firm value through dividend policy.*

Mediating Effect of Dividend Policy on the Impact of Institutional Ownership on Firm Value

Several studies that support the positive relationship between institutional ownership and dividend payouts, typically measured as dividend-payout-to-net-profit ratio, have been reviewed (Raza, 2009; Al-Gharaibeh, 2013). Other studies showed that this effect has no significant merit (Malavia Mardani et al., 2018). Thus, due to the intriguing nature of the possible effect of

institutional ownership on firm value through dividend policy in the Philippine context, it is reasonable to test this hypothesis:

Ha₁₁: *Institutional ownership has a significant effect on firm value through dividend policy.*

Mediating Effect of Dividend Policy on the Impact of Executive Compensation on Firm Value

Since CEOs play a big role and are instrumental in establishing dividend policy in firms, they can create an opportunity to benefit themselves. Although not all CEOs have access to such opportunities, this could generate mixed results. For instance, Dutta and Chang (2012) found that firms with poorly aligned executive compensation had higher dividend payout ratios, which opposed the study of Bhattacharya (1979), who found that CEO compensation has a negative effect on dividend payouts. Therefore, the evidence is mixed and became inconsistent as time passed by. This hypothesis was proposed for testing in this study, based on these mixed findings:

Ha₁₂: *Executive compensation has a significant effect on firm value through dividend policy.*

Direct Effect of Dividend Policy on Firm Value

Arnott and Asness (2003) recommended that the positive effect of recent dividend payout on future earnings growth is based on the agency theory of dividend policy. This is based on the idea that the reduction of free cash flow improves the performance of the company by paying dividends since managers will have fewer cash flows thus eluding suboptimal investments. These characteristics of dividend policy are following the free cash flow theory.

Several studies have proven the association between dividend policy and firm value (Arnott & Asness, 2003), but there are also some studies noting negative effects (Lumapow & Tumiwa, 2017) while several studies argue that dividend policy has no significant impact on firm value (Chinnaiah, 2020; Farsio et al., 2004; Husna & Satria, 2019). Based on the inconsistent result from the literature, this study documented its thirteenth hypothesis as follows:

Ha₁₃: *Dividend policy has a significant impact on firm value.*

Methodology

In this study, causal modeling was utilized because it sought to determine the mediating role of dividend policy on the impact of capital structure and corporate governance measures on firm value. In establishing causality, partial least squares (PLS) of the structural equation model (SEM) was used. Presented in Table 1 is the description of the observed and latent variables used in the study.

The data sample used in the study were taken from the OSIRIS database, company website, annual report, and PSE Edge. The researchers included all publicly listed companies with annual reports published on their company website except financial institutions from

the period of 2013 to 2016. However, companies with inadequate and conflicting data as well as those that temporarily or permanently stopped operations during the four periods were excluded in the analysis. Also, firms selected for analysis must have earned profits and distributed dividends throughout the study from 2013 until 2016. As of 2016, there were 324 public companies in the Philippine Stock Exchange (PSE), and 33 of which belonged to the financial sector. Thus, this study had 291 possible samples, and having considered those factors and limitations presented, 47 companies were used as the subject matter of the study during 2013, 2014, 2015, and 2016. Data analysis was done using the SmartPLS statistical software.

Table 1. Description of the Observed and Latent Variables

Variables	Description	Measurement
<i>Observed Variables</i>		
DR	Debt ratio**	Ratio of total debt over total assets Ratio
DER	Debt-to-equity ratio**	Ratio of total debt over total equity Ratio
BS	Board Size*	The total size of the board of directors Numeric
BI	Board independence*	Number of independent directors in the board Numeric
CEOD	CEO duality*	Whether the same person holds the CEO and chairman positions in the firm Dichotomous scoring
IO	Institutional ownership*	The percent of common shares held by institutional investors Percentage
EC	Executive compensation*	The total compensation of the CEO, including salaries and benefits Numeric
PR	Payout ratio**	Ratio of dividend per share over earnings per share Ratio
TQ	Tobin's Q**	The ratio of market capitalization over the book value of total assets Ratio
<i>Latent Variables</i>		
CS	Capital structure, indicated by DR and DER	Ratio
CG	Corporate governance, indicated by BS, BI, CEOD, IO and EC	Numeric, dichotomous scoring and percentage
DP (mediating variable)	Dividend policy, indicated by PR	Ratio and percentage
FV	Firm value, indicated by TQ	Ratio

* Determined from company website, annual report, and PSE Edge.

** Values from OSIRIS database.

Presentation of Findings, Analysis, and Implications

Descriptive Statistics

Table 2 presents the summary result of the descriptive statistics for the observed and latent variables. It shows the characteristics of the selected data including the number of observations, means, standard deviation, and their respective minimum and maximum values for the variables of corporate governance mechanisms, debt ratio, debt-to-equity ratio, payout ratio, and Tobin's Q used in the study for the year 2013 to the year 2016.

The results are as follows: debt ratio ranged from 0.6% to 60.4% ($M = 27.51\%$, $SD = 0.20$). Further, debt-to-equity ratio ranged from 1% to 516%, with a mean of 75.57% ($SD = 0.64$), and payout ratio ranged from 2.33% to 241.7% ($M = 0.3499$, $SD = 0.3452$). Board size ranged from 7 to 15 members, with an average of 11 members ($SD = 2.32$), while board independence ranged from 0 to 5 members, with a mean of 3 members ($SD = 0.86$). Institutional ownership ranged from 14.07% to 100% ($M = 81.11\%$, $SD = 0.27$), whereas executive compensation ranged from ₱80,000 to ₱224,514,260, with a mean of ₱20,403,721.87 ($SD = ₱36,851,925.64$). Besides, logarithm of executive compensation (LOGECOM) ranged from 5 to 8 ($M = 6.94$, $SD = 0.695$). Finally, Tobin's Q ranged from 0.06 to 5.35 ($M = 1.42$, $SD = 1.15$).

Dummy variables or binary variables indicating belonging to a given state (Kline, 2015) were used for one exogenous variable in the study. Dummy variables could not be usefully examined for normal distribution since only two points are possible (Kline, 2015). CEO duality could therefore only be analyzed

based on their distribution between the two categories used. Descriptive statistics showed that 53.73% of the firms in the study ($N = 188$) had a separate CEO and chairman of the board (CEO duality = 1) while 46.27% of the firms ($N = 188$) had a shared CEO and chairman (CEO duality = 0).

Structural Equation Modeling Results

This study made use of structural equation modeling (SEM) using SmartPLS, and Table 5 shows the summary of the results, and the following subsections discuss the results based on the table.

Based on the two indicators used to measure capital structure, Table 3 shows that there was a negative significant effect of capital structure on firm value. Further, looking at the negative coefficient of -0.489 , it appears that as the company infuses more debt in its capital structure, it corresponds to a decline in the company's firm value. The negative result is consistent with the finding of Cuong and Canh (2012) and Van Khanh et al. (2020), who tested the relation between capital structure design and its impact on firm value and discovered that leverage measured as total debt over total assets has a negative significant effect on firm value. The first hypothesis (H_{a1}) is therefore rejected in that capital structure has a negative significant effect on firm value.

This negative significant effect of capital structure on firm value is consistent with the assumption of hierarchy theory. This theory suggests that entities have an ordered preference for financing. This can also be demonstrated by the agency-related costs of debt, which results in firms suffering from financial distress. An example of such cost is the cost associated with

Table 2. Descriptive Statistics of Observed and Latent Variables

Variables	N	Min	Max	Mean	Std. Deviation
Debt ratio	188	0.0066	0.604	0.275127	0.20
Debt-to-equity ratio	188	0.01	5.16	0.7557	0.64
Payout ratio	188	0.0233	2.417	0.3499	0.3452
Board size	188	7	15	10.28	2.32
Board independence	188	0	5	2.64	0.86
Executive compensation	188	80,000.00	224,514,260.00	20,403,721.87	36,851,925.64
LOGECOM	188	5	8	6.94	0.659
Institutional ownership	188	0.1407	1	0.811147	0.27
Tobin's Q	188	0.06	5.35	1.4184	1.15

Table 3. Structural Equation Modeling Results for the Mediating Role of Dividend Policy on the Impact of Capital Structure and Corporate Governance Mechanisms on Firm Value

Models	Coefficient	Confidence Intervals		T Statistics	P Values
		2.50%	97.50%		
Direct Effect (N = 188)					
H ₁ : Capital structure -> firm value	-0.489	-0.629	-0.346	6.806	0.000 ***
H ₂ : Board size -> firm value	-0.252	-0.361	-0.141	4.452	0.000 ***
H ₃ : Board independence -> firm value	0.068	-0.039	0.185	1.209	0.227
H ₄ : CEO duality -> firm value	-0.241	-0.37	-0.12	3.768	0.000 ***
H ₅ : Institutional ownership -> firm value	0.056	-0.196	0.077	0.812	0.417
H ₆ : Executive compensation -> firm value	0.124	0.003	0.241	2.048	0.041 *
H ₁₃ : Dividend policy -> firm value	0.166	0.016	0.345	1.967	0.049 *
Mediating Effect (N = 188)					
H ₇ : CS -> DP -> FV	-0.018	-0.06	0.001	1.118	0.264
H ₈ : BS -> DP -> FV	-0.014	-0.031	0.016	1.255	0.210
H ₉ : BI -> DP -> FV	-0.009	-0.05	0.012	0.621	0.535
H ₁₀ : CEOD -> DP -> FV	0.026	0.000	0.098	0.965	0.334
H ₁₁ : IO -> DP -> FV	0.017	-0.001	0.043	1.463	0.143
H ₁₂ : EXECOM -> DP -> FV	-0.015	-0.043	-0.001	1.371	0.170
Model Fit Summary					
SRMR	0.020				
Chi-square	6.186				
NFI	0.985				

Note. Significant levels at ***0.001, **0.01, *0.05.

Note. SRMR = standardized root mean square residual; NFI = normed fit index or Bentler and Bonett index.

underinvestment wherein firms in financial distress may be unwilling to invest even in good projects.

Table 3 shows that there are three (3) corporate governance mechanisms, such as board size, CEO duality, and executive compensation, which were found to be significant in firm value. Executive compensation has a positive effect on firm value, whereas board size and CEO duality are confirmed to have a negative effect. Board independence and institutional ownership are the board-related corporate governance factors that were found not significant. More so, the board size has a negative significant effect on firm value as indicated by its negative coefficient of -0.252 and *p* value of less than 0.05. This inverse effect of board size on firm value highlights the adverse effects of having a huge number of directors like lack of coordination, flexibility, and

poor communication management. Besides, the larger the board size, the less accountability that the directors for board decisions have.

This confirms the study of Yermack (1996), where he concluded that as the size of the board increases, the company will be more exposed to mediocre performance as illustrated by the classic free-rider problem. This is consistent with the assumption of the agency theory wherein when the number of boards consists of many members, agency problems may increase, as some directors may be labeled as free riders. Also, a larger board could result in a meaningless discussion, since expressing opinions of a large number of individuals is generally time-consuming, which results in a lack of cohesiveness in the board. Ultimately, this study had contributed a

moderate finding on a negative effect of board size on firm value, but this remains an area that needs further research.

Board independence has a positive but not significant effect on firm value as indicated by its coefficient of 0.068 with a p value of more than 0.05. This positive effect of board independence on firm value is consistent with the assumption of agency theory, which suggests that external directors who are free from any stake in the firm are in a better position to closely monitor the top management and align their goals with the shareholders' interests. However, this study finds a weak positive link between board independence and firm value. The results of the study were also consistent with the findings of Van Khanh et al. (2020), whereas the findings of Abbasi et al. (2012) found a positive and a significant effect of board independence on firm value.

The result shows that CEO duality has a negative significant effect on firm value as illustrated by its coefficient of -0.241 and p value lower than 0.05. In other words, there was evidence that CEO duality influenced firm value negatively, and the possible reason was that CEO duality is very common in the Philippines. Notably, approximately 55% of the firms in the study did not have a dual CEO/chair role, indicating that these firms mainly adhere to the recommendations of the SEC's (2012) Principles of Good Corporate Governance. The theoretical position on the effect of CEO duality on firm value is that this should be a negative effect since a dual CEO/chair holds increased power while retaining an agent position (Van Khanh et al., 2020). These statements on this position are not often supported by academic literature (Abbasi et al., 2012; Cornett et al., 2009). Also, this negative effect of CEO duality on firm value is consistent with the conjecture of agency theory, which creates a conflict of interest that could negatively affect the interests of the shareholders and consequently the value of the company.

CEO compensation has a significant positive effect on the firm value indicated by its coefficient of 0.124 and p value of less than 0.05. This indicated that higher levels of executive compensation were associated with higher firm value, potentially because more skilled and experienced CEOs command higher wages and have stronger norms about financial reporting. This positive effect is consistent with the assumption of agency theory, by using executive compensation as

an agency cost and governance mechanism to align the interests of CEOs with those of the shareholders through salaries, bonuses, and long-term incentives such as stocks and options. This can be represented by the majority or 64% of those companies included in this study using per diem allowance, variable remuneration, and bonuses as their variants in paying executives other than fixed remuneration. The significant positive result was consistent with the findings of Dah et al. (2012) and supported that the different incentives appropriately bond the CEOs to act in the best interest of shareholders.

Institutional ownership has a positive but not significant effect on firm value as illustrated by its coefficient of 0.056 and p value of more than 0.05. This suggested that at least in the Philippine Stock Exchange, a high level of institutional ownership is not associated with a higher level of firm value. The result was consistent with the findings of Hartanti et al. (2019), wherein a constant rate of institutional ownership from period to period may cater a counterproductive effect on firm value. Hence, the result was not cowritten from the expectation that institutional ownership would influence firm value since the active role in firm management is often used by institutional investors, who often hold large blocks of the firm and direct the firm's activities to their preferences and their greater access to information (Bhattacharya, 1979; Desender, 2011).

Table 3 also disclosed that dividend payment has a significant positive effect on firm value as indicated by its coefficient of 0.166 and p value of below 0.05. In other words, firms that pay higher dividends also have higher firm value, which would be expected both for corporate governance reasons and because firms with higher dividend payments are interested in supporting investor requirements. This significant positive effect of dividend policy on firm value is consistent with the assumption of agency theory and signaling dividend theory and supported by the study of Arnott and Asness (2003), wherein this positive impact was as expected, given that dividend payments are an information signal that represents the firm's sustainable financial position.

The Mediating Role of Dividend Policy on the Impact of Capital Structure on Firm Value

Table 3 shows that there is a negative effect of capital structure on firm value when mediated by dividend policy as indicated by the negative coefficient

of -0.018 , but this effect is insignificant ($p > 0.05$). These findings were one of the dilemmas of this study because dividend policy has not been previously examined in terms of its mediating role. Therefore, there might be other factors that may affect their impact positively or negatively such as corporate social responsibility (CSR) and corporate governance. CSR and corporate governance are the firm's different strategies to adjust the capital structure to get better firm value. Further, this insignificant effect from capital structure to dividend policy to firm value could be attributed to other indicators used in measuring dividend policy at year-end, which could be addressed by future studies.

The Mediating Role of Dividend Policy on the Impact of Corporate Governance on Firm Value

Table 3 shows that dividend policy for all of the five corporate governance variables has no mediation effect on firm value. Their p values of more than 0.05 indicated that there was no mediation for these tested hypotheses. Therefore, it can be stated that dividend policy does not mediate the effect of corporate governance variables on firm value. Thus, this study fails to reject H_{a_8} , H_{a_9} , $H_{a_{10}}$, $H_{a_{11}}$, and $H_{a_{12}}$. These findings exemplified the core concept of agency theory since most of the variables used to measure corporate governance focuses primarily on the functions of the board.

The Mediating Role of Dividend Policy on the Impact of Board Size and Board Independence on Firm Value

Dividend payment does not mediate the impact of board size and board independence on firm value. Thus, dividend payments do not change this effect. Previous studies have not tested the mediation effect of dividend payment directly, but they have found that there are conflicting results of board size and board independence on dividend payment and firm value (Dutta & Chang, 2012; Malavia Mardani et al., 2018; Muhammad Sadiq Shahid et al., 2016). Consequently, this finding was consistent internally and suggested that there may be no more major role for dividend payment, although it could be explored further by increasing the possible number of companies.

The Mediating Role of Dividend Policy on the Impact of CEO Duality on Firm Value

The effect of CEO duality on firm value was not mediated by dividend payment. Thus, this finding fails to reject the hypothesis since the mediating effect was not significant as indicated by its p value of more than 0.05. In theory, CEO duality indicates a weak corporate governance structure, creating incentives and capabilities for the CEO to manipulate firm decisions such as dividend payment and earnings statement for their benefits (Dutta & Chang, 2012). In practice, a meta-analysis of studies on CEO duality has suggested that its effect is weak and may only be captured using accruals-based methods (García-Meca & Sánchez-Ballesta, 2009). While this impact was not mediated, the next question that must be asked is whether this result has any practical significance in today's business practices since almost half of the Philippine firms have a shared CEO and chairman function. Further, future researchers may consider the possible mediating role of earnings management that will capture those accrual-based methods as a result of the shared CEO/chairman position.

The Mediating Role of Dividend Policy on the Impact of Executive Compensation on Firm Value

Dividend payment does not mediate the impact of CEO compensation on firm value. This result is particularly important because at least in some firms, CEOs do have the capability to manipulate dividend payment and earnings announcement for their benefit (Minnick & Rosenthal, 2014). For example, CEOs expecting a restricted stock grant that cannot be sold could increase dividend payouts to increase their returns, even if this negatively influenced the firm value (Minnick & Rosenthal, 2014). At the same time, firms with highly skilled CEOs may show the opposite response due to better management and knowledge (Bhattacharya, 1979). Therefore, this effect is likely to be complex. However, appropriate dividend payment and higher firm value could both result from the influence of a highly skilled CEO, thus leading to a common relationship. This remains an opportunity for further development and study.

The Mediating Role of Dividend Policy on the Impact of Institutional Ownership on Firm Value

Table 3 shows that dividend payment does not mediate the impact of institutional ownership on firm

Table 4. *Summary of Hypotheses and Decisions*

	Hypotheses	p Values	Decision
Ha ₁	Capital structure has a significant impact on firm value.	0.000***	Confirmed
Ha ₂	Board size has a significant impact on firm value.	0.000***	Confirmed
Ha ₃	Board independence has a significant impact on firm value.	0.227	Rejected
Ha ₄	CEO duality has a significant impact on firm value.	0.000***	Confirmed
Ha ₅	Institutional ownership has a significant impact on firm value.	0.417	Rejected
Ha ₆	Executive compensation has a significant impact on firm value.	0.041*	Confirmed
Ha ₇	Capital structure has a significant effect on firm value through dividend policy.	0.264	Rejected
Ha ₈	Board size has a significant effect on firm value through dividend policy.	0.210	Rejected
Ha ₉	Board independence has a significant effect on firm value through dividend policy.	0.535	Rejected
Ha ₁₀	CEO duality has a significant effect on firm value through dividend policy.	0.334	Rejected
Ha ₁₁	Institutional ownership has a significant effect on firm value through dividend policy.	0.143	Rejected
Ha ₁₂	Executive compensation has a significant effect on firm value through dividend policy.	0.170	Rejected
Ha ₁₃	Dividend policy has a significant impact on firm value.	0.049*	Confirmed

Note. Significant levels at ***0.001, **0.01, and *0.05.

value. This is not surprising since dividend payments fundamentally allow owners to monitor and enforce earnings distributions (Al-Gharaibeh, 2013). In theory, institutional investors with their high monitoring and involvement activities (Al-Gharaibeh, 2013) would be ideally positioned to both enforce a higher dividend payout ratio and ensure higher firm value through monitoring. But this co-occurrence effect was not observed to affect firm value. This study also supported the positive effect of institutional ownership on dividend payout (Raza, 2009; Al-Gharaibeh, 2013). Therefore, it is acknowledged that there are other market factors or structures that could play a mediating role in improving firm value other than dividend policy.

Conclusion

The impact of capital structure on firm value is the first direct relationship tested in this study, and results showed that as long-term debt increases, the firm value of the Philippine companies decreases suggesting that debt imposes a burden in maintaining financial liquidity particularly to interest and principal repayment that

could result to bankruptcy. In short, financial distress should be an important disadvantage of using excessive debt that reduces firm value, and its costs should be weighed against its corporate tax benefit. Further, results exemplified how agency-related cost such as cost associated with underinvestment affects firm value. This problem normally applies to Philippine firms suffering from the adverse effect of using excessive debt, such that owners may be unwilling to invest even in good projects. Instead, equity holders may prefer to receive higher dividends rather than generating positive cash inflows. Thus, this negative effect of capital structure on firm value can also be attributed to underinvestment, which is an agency cost of debt that may reduce the benefits from the value of debt, in controlling the agency cost of equity. Ultimately, this result shows that Philippine firms did not attain the optimal balance of using debt and equity, maybe because they focused primarily on the benefits of using debt and ignored some important considerations such as the level of operational risk, the structure of enterprise resources, and the amount of taxable income and income tax rates.

Besides, the tested result on the direct effects of corporate governance mechanisms on firm value shows that board size and CEO duality have a negative significant effect on firm value in terms of Tobin's Q, whereas executive compensation has a positive significant effect on firm value. However, board independence and institutional ownership have a positive but not significant effect on firm value. These results are grounded on the assumption of agency theory.

This result concludes that Philippines companies with larger boards can create agency problems, which can be attributed to their possible ineffectiveness arising from free-rider problems. On the other hand, CEO duality for Philippine firms is just a common situation since almost half of the sampled companies have a shared CEO/chairman position. The problem is this negative effect of CEO duality on firm value can cause a conflict of interest arising from a principal-agent relationship. This conflict of interest arising from dual roles as CEO/chairman creates power issues and issues related to succession that may weaken the system of check and balance in making prudent decisions. Executive compensation, on the other hand, shows a positive effect on a firm value, which can be attributed to Philippine firms aligning their remuneration to the company's success. With this kind of well-designed compensation scheme, Philippine firms are now substantially mitigating the problems arising from conflict of interest as indicated by its positive effect on firm value. Lastly, board independence and institutional ownership show a positive but not significant effect on firm value. Although they are not significant in this study, their positive effect shows that they are good indicators that may require further research.

Results also provide strong evidence that dividend policy has a positive significant effect on firm value. Therefore, we conclude that this positive effect can be both attributed to corporate governance reasons and because firms with higher dividend payments are interested in supporting investor requirements, which is consistent with dividend signaling theory. This positive effect can also be attributed to older and more established firms with less capital expenditure demand and slower stock price growth. In contrast, a younger and more rapidly growing firm with a greater need for capital investment and higher stock growth can be expected to have a low dividend payout ratio or even not pay dividends at all, while shareholders gain value

from increases in the stock price. Further, this result provides evidence that firms with a higher dividend payout ratio can also be assumed to have higher firm value, which would be consistent with an established firm that has a mature corporate governance system with proven processes and monitoring mechanisms in place (Arnott & Asness, 2003). Although firm age was not used in this study as a moderating factor, its inclusion could have an effect on firm maturity that can be explored for future research.

Finally, results from this study revealed that there is no mediating role of dividend policy on the impact of capital structure and corporate governance mechanisms on firm value. This result implies that dividend policy as measured by payout ratio did not capture some indirect or substitution effect on the studied hypothesis. Therefore, this study concludes that there might be other factors or indicators related to strategic policies that may strongly mediate these effects. These findings can also be attributed to the proxy variable used in measuring dividend policy since it focuses only on cash dividends. Other measures that future researchers may consider are stock dividends, options, and warrants.

Recommendations

The ultimate goal of this study was to provide a better understanding of the possible mediating role of dividend policy in the impact of capital structure and corporate governance on firm value. Results of this study showed that capital structure, the board size, CEO duality, and executive compensation were significant variables that affect firm value. If companies want to increase their firm value, firms should focus on optimal capital structure and put a high control of the good corporate governance mechanism. Firstly, the OECD Principles of Good Corporate Governance (2012) should be followed, as these principles have been shown in this study to support corporate governance and effective reporting. Further, firms should control their CEO compensation by increasing the variants that will align the interest of the executives with that of the shareholders.

Secondly, SEC should start looking at the possibility of minimizing the shared responsibility of one person as a chairman and as a CEO due to its possible adverse effect on firm value. Thus, it is suggested to SEC and other regulatory bodies such as PSE and Financial Reporting Standards Council (FRSC) to observe

other variables that may affect good governance. Besides, the SEC in collaboration with the Institute of Corporate Directors (ICD) should have more frequent examinations of firms that are most likely to violate rules/regulations due to ownership structure. It is also suggested that regulators such as SEC, Bangko Sentral ng Pilipinas (BSP), the Philippine Stock Exchange, the Credit Rating Agencies, and the Financial Reporting Standards Council reassess the compliance of Philippine firms with financial reporting standards, review company failures related to corporate governance in the Philippines, review the laws and regulations that provide the legal basis for the protection of stakeholders, and, finally, include a self-evaluation in assessing their effectiveness in protecting stakeholders.

Finally, it is suggested for future researchers to examine the indicators of good corporate governance in full to get a best measure of the latent variable or develop an index for good governance using a scorecard based on OECD's five criteria for good corporate governance. Another avenue for future researchers is the link between corporate governance and CSR in adding value to the company since firms may use CSR as a shield to cover up poor corporate governance that will affect firm value individually or conjointly. Thus, it may be interesting for future researchers to use a scorecard and checklist based on OECD for corporate governance and CSR, respectively, to arrive at a more robust result in examining their effect on firm value.

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