

THE ROLE OF REGULATORY AUTHORITY IN AFFECTING FIRM PERFORMANCE

*Kashif Rashid**, *Sardar M N Islam***, *Siti Nuryanah****

Abstract

This paper examines the role of regulatory authority in affecting the performance or value of a firm. The study has used panel data of 120 companies for the years 2000 to 2003 for developing (Malaysia) and developed (Australia) financial markets. The findings of the study suggest that there is a positive relationship between the regulatory authority efficiency and the financial health of a firm. The dual leadership structure results in the value creation for shareholders in these markets as the regulatory authorities force independent CEO to defend the rights of shareholders. On the contrary, the external regime in these markets cannot manage the agency cost of debt as the free cash flow is not utilised efficiently to resolve the principal (shareholders) and agent (managers) conflicts in these markets. Finally, the effectiveness of regulatory authorities results in higher information efficiency and optimal utilisation of assets in the market leading to defending the rights of shareholders.

Keywords: Corporate Governance, Regulatory Authority, Firm Performance, Board Size, CEO Duality

* *Management Sciences Department, COMSATS IIT, Abbottabad, Pakistan*

** *Victoria Institute of Strategic Economic Studies, Victoria University, Australia*

Email: sardar.islam@vu.edu.au

*** *Department of Accounting, Faculty of Economics, Universitas Indonesia, Indonesia*

1. Introduction

Regulatory authority plays an important role in affecting firm performance and in attenuating the negative effect of an economic disaster in the economy which therefore helps firms survive the crisis (Zhuang et al. 2000; Beiner et al. 2004; Tam & Tan 2007; Erkens et al. 2012) Studies of corporate governance and the value of a firm have been conducted in both developing and developed countries. Research in developing financial markets was conducted by, for example, Al-Malkawi et al. (2014), Francis et al. (2013), Claessens and Yurtoglu (2013), Morey et al. (2009), Kyereboah-Coleman and Biekpe (2006), Black et al. (2006a), Leng and Mansor (2005), Nenova (2003) and Black (2000), while van Essen et al. (2013), Boubaker and Labégorre (2008), Black et al. (2006b), Klapper and Love (2004) and Gompers et al. (2003) are some of the ones discussing corporate governance in developed markets.

The above studies examined corporate governance and the value of a firm (CGVF) relationship and have tested the relationship between regulatory authority efficiency and a firm performance. But, they have overlooked the differences in the nature of the process by which the regulatory authority affects the shareholders' wealth in these markets as there are additional factors affecting the nature of this relationship particularly in

developing financial markets. Moreover, while it is important to understand the process by which the regulatory authority controls and optimally utilises the internal corporate governance instruments so that the policies can be developed to mitigate financial crisis, the role of regulatory authority in disciplining the important internal corporate governance instruments has not been tested in the previous studies.

The paper addresses the gap in the literature by incorporating the role of additional factors which affect the regulatory authority and shareholders' wealth relationship in combined markets and by using a correct proxy to value a firm. In addition, the study contributes to the discussion by interpreting the results in the light of different business and management theories which has been overlooked by the previous literature. Finally, this paper proposes policy recommendations to the regulators to reduce the likelihood of financial disaster in the economy.

Based on the data of 120 publicly listed companies, this paper shows that an efficient regulatory regime plays a positive role in protecting the shareholders' rights in developing and developed financial markets and makes the financial system more stable. The regulatory and judicial authority in these selected financial markets disciplines the independent CEO in improving the value of a firm. On the contrary, the regulatory institutions in these selected markets do not handle the agency cost of

debt, thus deteriorating the shareholders' value. Finally, the external regulatory regime also disciplines the management to optimally utilise the assets of the firms and create information efficiency by correctly pricing the shares in these markets.

After the introduction, the rest of the paper is structured as follows: Section 2 explains the literature review. The next section deals with the hypothesis development followed by the methodology in Section 4. Section 5 consists of results of the model and the following Section 6 provides explanation of the results. Finally, Section 7 presents the conclusion of the paper.

2. Literature Review

The definitions of corporate governance in the existing literature are associated with the protection of the rights of shareholders in financial markets. The role of managers, shareholders, employees, customers, stakeholders and executive management in improving the value of a firm is important in the market (Cadbury 1992, p. 15). Furthermore, corporate governance also highlights on the better management of the relationship between principal (shareholders) and agent (managers). Corporate governance has an important bearing on the value of a firm. The higher corporate governance provisions make the firms democratic which results in improvement in shareholders' value (Pinkowitz et al. 2003; Nam & Nam 2004). Corporate governance instruments consist of internal and external corporate governance provisions. The internal corporate governance provisions include the role of internal monitors in the market (Gompers et al. 2003). These are related to firm specific factors such as board size, independent auditors, qualification of directors, independent directors to total directors' ratio and the role of CEO and Chairman. On the contrary, the external corporate governance instruments are related to external monitors operating in the market (Dallas 2004; Brown et al. 2011). These monitors include the role of judiciary and the role of a regulatory authority in the financial market including regulations, business environment, capital market size and liquidity, banking and financial institutions, product market competition, and also the role of government and the role of politicians, (Allen & Gale 2001; Bushman & Smith 2001; Gupta 2005; Douma & Schreuder 2008).

The role of internal corporate governance instruments is important in controlling the agency cost by reducing the level of divergence of the principal and agent from the market. These instruments in the study consist of the role of board size, CEO duality, efficient market, optimal use of assets and capital structure in affecting the value of a firm. The regulatory authority and judiciary are the external corporate governance instruments in financial markets.

Regulatory authority refers to the institutions which make and implement the rule of law in the market. These institutions mainly include central or reserve bank, various securities and investment commissions and judiciary in the market. The need for regulatory authority normally arises due to the existence of incomplete contracts in the firm leading to increase in information asymmetry and moral hazard in the market (Aghion & Bolton 1992). The regulatory authority can reduce the information asymmetry by incorporating the future contingencies among the contracts between different players in the market.

The developed (Australian) financial market follows outsider system of corporate governance. The characteristics of this system suggest the absence of blockholders, efficient allocation of capital, effective regulatory authority, powerful managers and emphasis on creation of short-term value for the shareholders in this market. Due to strong regulatory control in the developed financial market, the risk is handled properly and value is created for shareholders (Allen & Gale 2001; Heinrich 2002; Wei 2003).

On the contrary, the developing (Malaysian) financial market is different from the developed (Australian) market as it uses less sophisticated instruments to manage risk from the system compared to the developed market (Hunt & Terry 2011). Furthermore, there are differences in the corporate governance systems followed by these markets. The developing (Malaysian) financial market follows the hybrid system of corporate governance. The characteristics of this system suggest that concentrated shareholding, poor regulatory and judicial authority, dominance of few families, non-existence of market for corporate control and higher level of agency cost due to pyramidal and cross-shareholding are the hallmarks of this market (Wei 2003).

The regulatory authorities can improve the value of a firm by increasing the awareness among the investors and corporate executives as there is an ignorance of law in developing markets. Furthermore, the managers (agent) are involved in self-dealing, stealing corporate resources, assets stripping and violation of their contracts with shareholders (principal) in this market (Gupta 2005). The additional imperfections in the developing market (such as Malaysian) include weak property laws, inefficient stock market, poor financial disclosures and inconsistent accounting standards (Ararat & Ugur 2003).

These features of developing market (such as Malaysian) suggest a need to transform the relationship based corporate governance system to the rule based system so that the agency cost from the market can be decreased. The vested interests of the agent should be reduced and pyramidal and cross shareholding should also be demolished to minimise

the divergence between the cash flow and voting rights in this market (Zhuang et al. 2000).

The management and business theories related to shareholders' value in the selected financial markets and the role of internal corporate governance instruments is explained as follows. There are two theories about the relationship of the principal and agent in financial markets (De Matos 2001). The first theory related to this relationship is agency theory. This theory suggests that there is a divergence of interest between the principal (shareholders) and the agent (managers) in financial markets. This divergence results in an increased monitoring cost in the market, affecting the value of a firm in a negative manner.

The second theory related to the role of the principal (shareholders) and agent (managers) in affecting the value of a firm is stewardship theory. This theory suggests that the interests of the principal (shareholders) converge with the agent (managers) which compels the management to create value for the shareholders (Davis et al. 1997; Clarke 2004). The corporate governance principles are also based on the convergence of the interests between principal (shareholders) and agent (managers). The effective regulatory authority can align these interests by protecting the rights of all the stakeholders in the financial market as suggested by Black (2000).

The board plays an important function in decreasing the level of information asymmetry in the market (Hermalin & Weisbach 1991; Linck et al. 2008). It can discipline the managers, CEO and other stakeholders to create value for shareholders. The board can also select the management of the firm, review their performance and compensate them (Bain et al. 1996; Nam & Nam 2004).

The role of board size is important in affecting firm's performance in financial markets (Yermack 1996; Eisenberg et al. 1998, p. 45). Loderer and Peyer (2002) argue that a bigger board deteriorates the value of a firm as there is a higher agency cost due to the free riding problem, delayed decision making and inactive monitoring by the members of a bigger board. On the contrary, the advantages related to a bigger board suggest that it cannot be dominated by the CEO, affecting the value of a firm in a positive manner. The bigger board is able to deter CEO from making irrational decisions and results in a reduced agency cost in the firm.

The role of CEO is important in making the firm democratic by incorporating corporate governance provisions (Lam & Lee 2008). CEO turnover has an adverse relationship with the firm's performance as it gives a negative signal to investors about the financial health of the firm and they (investors) stop making more investments (Bhagat & Jefferis 2005). The term of the CEO is also related to shareholders' value as the CEO is interested in the firm's performance in his own tenure, which makes him biased towards short-term value creation for shareholders (Wei 2003). The

regulatory authorities can overcome this problem in the market by relating the short-term and long-term value of the firm with incentives for the CEO. This will lead to improved performance of the CEO in the market.

There are two main types of leadership structures in the firm. The first type of structure is non dual (Nam & Nam 2004). In this type of mechanism, the role of CEO and Chairman is performed by two different individuals. This mode of structure is consistent to corporate governance principles as the board is independent in deciding the affairs of the firm. In non dual leadership structure, there is an agency cost between the CEO and Chairman due to the divergence of their interests.

In the second type of leadership structure, the role of CEO and Chairman is performed by a single person and is the dual structure of leadership. This type of structure is harmful to the shareholders' wealth as the independence of board is affected adversely (Jensen 1993, p. 36; Higgs & Britain 2003, p. 23). On the contrary, dual leadership structure can also create value when the CEO acts as a steward as his interests converge with shareholders. The independent CEO provides a unified impression and plans accurately making better financial and strategic decisions improving the firms' performance.

The role of information and allocation efficiency is also an important component of corporate governance (Donaldson 2003). Information efficiency encourages investors to judge the true performance of the management and allows the shareholders to create value enhancing decisions (De Matos 2001). Likewise, allocation efficiency is important in affecting the shareholders' wealth as the assets available are utilised optimally. The shareholders generate higher returns in this case, improving the firm's performance. On the contrary, deterioration of value takes place when the assets of the firms in the market are under and over-utilised (Nam & Nam 2004).

Debt plays an important role in protecting the shareholders' rights by reducing the agency cost in developing and developed financial markets (Jensen 1986; Leng & Mansor 2005). Debt can improve the value of a firm in financial markets by controlling the free cash flow problem and restraining the managers from deriving private benefits at the expense of shareholders' wealth (Zwiebel 1996, p. 1209). The amount of cash available at the discretion of managers is reduced in indebted firms as it is paid to the creditors eliminating under and over-investment problems from the market and improving shareholders' value.

Similarly, debt has several associated disadvantages, which include a higher agency cost between managers and creditors and higher bankruptcy cost in the market. The powerful regulatory authorities in the developed market and healthy role of majority shareholders in the

developing market can reduce the agency cost of debt and improve the relationship between the creditors and managers in these financial markets. The next section deals with the important theories about the role of capital structure in affecting the firms' performance.

One of the earliest theories in the literature on finance pertains to the impact of capital structure on the value of a firm. The Modigliani and Miller hypothesis (1958, 1963) was the pioneer in this field. According to this theory, capital structure is irrelevant in improving the value of a firm (Elton & Gruber 1975; Chew 2003). Firms operate in the perfect market and do not face agency costs related with high leverage. Furthermore, there is no interest rate, transaction cost or bankruptcy cost related to higher debt in the market. In addition, given the tax benefits associated with debt, the optimal capital structure turns out to be 100% debt.

The second theory in this field is the trade-off theory. This theory emphasised at a trade-off exists between tax benefits associated with leverage and the agency cost of debt and the cost of financial distress. Furthermore, the theory argues that tax benefits achieved at the corporate level are offset by tax costs at the individual level (Copeland et al. 2005).

The final theory about the role of capital structure in affecting the value of a firm is the second trade-off theory. This theory suggests that debt can be used as a double-edged sword. It gives the benefit of solving the free cash flow problem as this cash can be used to pay off debt. However, there is a cost of financial distress and agency cost between creditors and managers related to the higher debt in the financial market (Elton & Gruber 1975; Miller 1977).

3. Hypothesis Development

This section consists of the hypothesis relevant for this study, which is stated as follows.

H1: The effective regulatory control improves shareholders' value in developing and developed financial markets.

The role of a regulatory authority is imperative in affecting the value of a firm in both developing and developed financial markets (Dittmar et al. 2003). A regulatory regime protects the rights of shareholders and reduces the excessive control of the managers resulting in improvement in the value of a firm. Due to a weak regulatory regime, the rights of shareholders are not protected in the developing market as these shareholders are not allowed to use their votes effectively. This restricts the shareholders to attend emergency meetings about financial, operational and investment decisions of the firm.

The regulatory authorities in developing and developed markets cannot maintain optimal board size, remove an underperforming board of directors and control the adverse actions of managers and majority shareholders (Black 2000; Nam & Nam

2004). The independent auditors cannot conduct the audit on independent basis due to different accounting standards in developing markets.

The managers in developed markets are involved in tunneling as the excessive cash flow is used for empire-building instead of making value adding investments. Tunneling takes the forms of both under and over-investment of the free cash flow. The under-investment occurs when managers do not invest the excessive cash in the projects which create positive returns as the creditors share the part of the benefits from the investment. On the contrary, the over-investment of the free cash occurs when managers over-invest the cash in the pet projects (projects which provide abnormal returns to managers) instead of providing dividends to shareholders (Rashid & Islam 2008). Both these activities deteriorate the value for shareholders in the financial markets.

Pereiro (2002) argues that judiciary in the developing market does not play a neutral role as different political groups heavily influence the decision making process in the courts. This feature makes the judges corrupt, biased, ineffective and unproductive. An effective judiciary in the developing market can reduce the free hand of managers and can enable shareholders to make optimal decisions for their own value creation (Ahunwan 2003).

The education of judges plays an important role in enhancing the understanding of corporate crimes in the selected markets. According to Ararat and Ugur (2003), the judiciary in developing markets is weak, under-resourced and uneducated in making correct corporate decisions. Furthermore, there is a lack of supervisory sessions to guide the judges and proper libraries for them to improve their decision making capacity.

The role of government as a majority shareholder is also not healthy in firms of developing financial markets. The managers in these firms are the representatives of the government (Ararat & Ugur 2003, p. 63). They do not have technical skills and are not qualified to pursue their jobs about making value creating decisions for the investors. These firms should be privatised so that qualified and competent professionals, with their expertise, can add value to the shareholders in these markets (Gupta 2005).

Pereiro (2002) suggests that corporate governance and the value of a firm is different in developing and developed financial markets due to additional factors/imperfections associated with a firm operating in a developing market. These include high inflation, political instability, high leverage, unstable government policies, inconsistent accounting standards and a weak institutional environment. The additional factors affect the disciplinary role of internal and external corporate governance mechanisms in developing financial market, harming the value of a firm. However, the regulatory authority plays a positive role in improving the shareholders'

wealth in both the developing and developed financial markets.

Figure 1. The Relationship between Regulatory Authority and the Value of a Firm

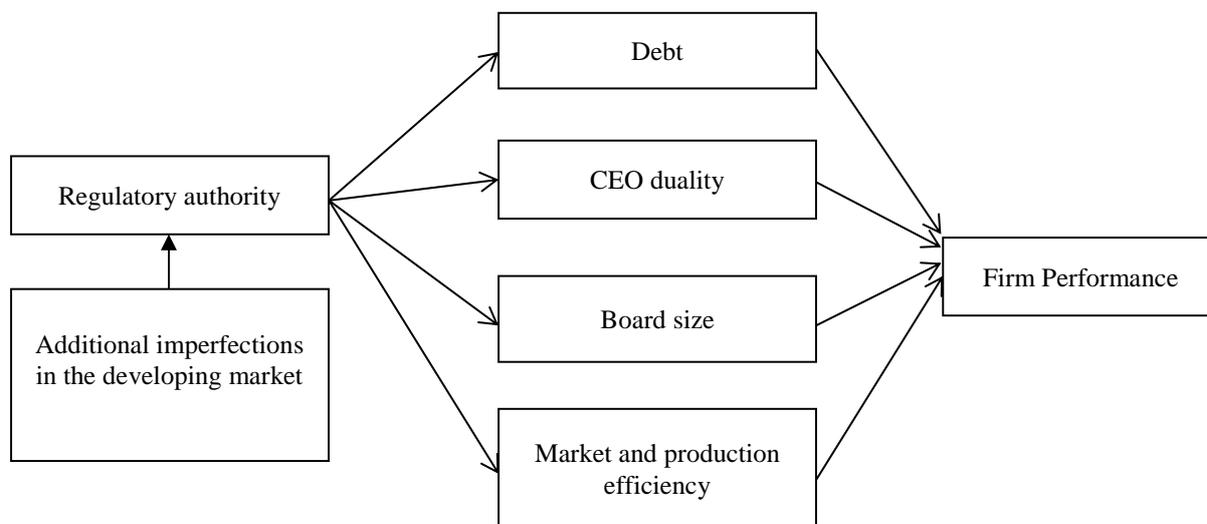


Figure 1 shows that the regulatory authorities can ensure the effective role of debt to reduce the misuse of excessive cash flow. Similarly, the regulatory institutions can discipline the independent CEO in a dual leadership structure and force him to create value for the shareholders in financial markets. Effective regulatory framework can decrease the agency cost among board members reducing the free rider problem from the board. Furthermore, the regulatory authorities can make the markets informational efficient and encourage the management to utilise the assets of the firms optimally. Finally, the intervening role of additional imperfections in the developing market is also presented.

Model for the study

Corporate governance has a positive relationship with the value of a firm in developing and developed financial markets. The relationship can be expressed as follows.

Value of a firm = f (internal corporate governance variables + external corporate governance variables (regulatory authority efficiency) + control variables + error term).

The multifactor model for the valuation of companies in developing and developed financial markets is as follows.

Tobin's Q = f (Duality, Gr, Log Pro, Pb, Rota, Log Size)

where:

Tobin's Q = proxy for the value of a company;

Duality = Chairman and Chief Executive Officer duality;

Gr = gearing;

Log Pro = logarithm of procedures involved in the settlement of disputes (regulatory index);

Pb = price to book value ratio;

Rota = return on total assets; and

Log Size = logarithm of board size.

4. Methodology

The data relevant for the study is collected from the database and the websites of the firms listed at the Kuala Lumpur and Australian Securities exchanges for the years 2000-2003 and is secondary in nature. The stock exchange handbooks and the World Bank and International Monetary Fund websites are used to confirm the financials of the selected firms. Sixty companies from each market are selected for the econometric analysis relevant to the study. The study uses stratified random sampling, which involves segregation of companies from the listed companies and generalising properties of all the listed companies by analysing the properties of the sample companies.

Construction of the variables

The independent variables used in the model for the study are CEO duality, gearing ratio, regulatory authority efficiency, price to book value ratio, return on total assets and board size. The dependent variable used in this study is the proxy for Tobin's Q.

The first variable in corporate governance and the value of a firm relationship model is CEO duality. The variable is operationalised by using a dummy variable in this study (Lam and Lee 2008). The value of the variable is taken as 1 when a single person performs the role of the CEO and the Chairman. On the contrary, value of the variable is 0 if these roles are performed by two separate individuals. We support agency theory and argue that the dual leadership structure deteriorates the value of a firm in

the selected financial markets as the board cannot make rational decisions due to the domination of a powerful CEO.

The second variable (gearing ratio) is used to operationalise the role of debt in affecting the value of a firm in the selected financial markets. The variable is measured by taking the debt and equity ratio of firms relevant for the study. We expect a positive relationship between debt and the value of a firm in developing and developed financial markets as the free cash flow problem is reduced in the presence of creditors.

The role of regulatory authority efficiency in affecting firm performance in the selected financial markets is operationalised by using a regulatory efficiency index. The index is calculated by taking into account the time and cost involved in resolving the corporate disputes in developing and developed financial markets (Gompers et al. 2003). The higher procedures and cost involved in the settlement of disputes show a weak regulatory and judicial regime in the market and higher value on the index. We expect a negative relationship of the variable with the value of a firm as an inefficient regulatory regime is expected to deteriorate the value of a firm in the selected financial markets.

The control variables such as price to book value ratio and return on total assets are used to analyse the role of factors in addition to corporate governance instruments in affecting shareholders' wealth. We expect a positive relationship of both the variables in affecting the value of a firm as correct valuation and efficient usage of assets of firms show that regulatory authorities play a positive role in improving the value of a firm.

The final variable used in the current study is the board size. The study follows the methodology used by Leng and Mansor (2005) as the variable is constructed by counting the number of directors on the board. The variable is expected to have a negative relationship with shareholders' wealth as we support the agency theory in the selected financial markets.

The dependent variable used in the current study is the proxy for Tobin's Q as used by Bhagat and Jefferis (2005) and Kyereboah-Coleman and Biekpe (2006) to value shareholders' wealth. The current proxy is calculated by adding market capitalisation and total assets. The shareholders' fund is subtracted from the added value and is lastly divided by total assets to calculate the final value for the proxy for Tobin's Q. This proxy overcomes the measurement problem to find the replacement value of institutional debt in the developing financial market as highlighted by Sarkar and Sarkar (1999).

Empirical framework

The empirical framework used in this study is similar to Leng and Mansor (2005) and Kyereboah-Coleman and Biekpe (2006), as the model relevant for the study consists of internal and external corporate governance instruments and control variables. The econometric models with different functional forms and alternate specifications are run. The model for the study is selected on the basis of strong diagnostics and best functional forms of the variables (Gujarati 2003). The results are made robust by performing the tests to detect autocorrelation, multicollinearity and heteroscedasticity in the model.

5. Results of the Model

The mathematical form of the corporate governance and the value of a firm (CGVF) model relevant to the study is given below:

$$Y_t = C + a_{1t} X_{1t} + a_{2t} X_{2t} + a_{3t} \log X_{3t} + a_{4t} X_{4t} + a_{5t} X_{5t} + a_{6t} \log X_{6t} + U_t \dots \dots (1)$$

where:

Y_t = Dependent variable

C = Intercept

a = slope

X_{1t} = CEO duality;

X_{2t} = Gearing ratio;

X_{3t} = Regulatory authority efficiency index;

X_{4t} = Price to book value ratio;

X_{5t} = Return on total assets; and

X_{6t} = Board size.

The abovementioned equation shows the relationship between the value of a firm, corporate governance instruments and control variables in developing and developed financial markets. The estimated form of the model is presented as follows.

$$Y_{it} = 0.54 + 0.14 \text{ Duality} - 0.07 \text{ Gr} - 0.15 \text{ Pro} + 49.03 \text{ Pb} + 0.93 \text{ Rota} + 0.20 \text{ Size} \dots \dots (2)$$

$$(3.09)** \quad (2.72)** \quad (-4.36)** \quad (-2.31)**$$

$$(13.56)** \quad (1.78)* \quad (1.25)$$

$$R^2 = 0.77$$

The values of coefficients are in the first row. The values in the parenthesis below represent the T statistics. * Represents the significance of the variable at a 10% significance level and ** represents the significance of the variable at a 5% significance level.

The results for the variance inflation factor are presented in Table 1 and vary for the variables of the selected model from 1.06 for gearing ratio to 1.35 for procedures (regulatory index), endorsing the absence of multicollinearity in the model. The disturbance of the Ordinary Least Square (OLS) assumptions is prominent as the variance of the error term is unequal. The variance of the error term is made equal by transforming OLS estimation into the Generalised Least Square (GLS) estimation method (Maddala 2001). This conversion is performed by giving the white diagonal treatment to the model.

Table 1. Values of Variance Inflation Factor for Developed and Developing Markets

Variables	Variance Inflation Factor
Gearing	1.06
Procedures	1.35
CEO Duality	1.14
Return on Total Asset	1.19
Board Size	1.09
Price to Book Value Ratio	1.16

The model is based on the data relevant for both the markets as combined market regression is performed. The results of the model are presented in Table 2 and show that the independent variables of the model (gearing ratio, price to book value ratio, CEO duality, board size, return on total assets and regulatory authority efficiency) explain 77% of the variation in the value of a firm (Tobin's Q). These

variables are unable to explain a 23% variation in Tobin's Q (dependent variable). The value for the F statistic is 276.93 and is significant, which shows that the model is stable and reliable (Gujarati 2003). Finally, the value for the dependent variable is 1.42, depicting that the firms are financially strong and create value for the shareholders.

Table 2. Econometric Model for the Study

Variables	Model
Constant	0.54 (3.09)**
Log Board Size	0.20 (1.25)
CEO Duality	0.14 (2.72)**
Gearing	-0.07 (-4.36)**
Price to Book Value Ratio	49.03 (13.56)**
Return on Total Assets	0.93 (1.78)*
Log Procedures	-0.15 (-2.31)**
R-squared	0.77
Mean Dependent Variable	1.42
F-statistic	(276.93)**

Notes:

Total number of observation for combined model = 480.

* Represents the significance of a variable at the 10% significance level.

** Represents the significance of a variable at the 5% significance level.

The result for the incremental regression

The test for the incremental regression is performed to analyze the importance of each independent variable in affecting the dependent variable in the CGVF model for developed and developing markets. This test is performed by removing the individual (independent) variable and analysing the effect on the value for the R Squared. It is observed that after the removal of the price to book value ratio from the

model of CGVF, the value for the R Squared declines from 77% to 15%.

The result is presented in Table 3 below and shows that the removal of the price to book value ratio limits all other independent variables to explain a lesser portion of the dependent variable. The result also proves that investor's confidence and information efficiency play a vital role in the selected markets confirming our regression results.

Table 3. Results of Incremental Regression

Models	Combined
R-squared (original)	0.77
R-squared (after the removal)	0.15

Source: Authors' estimates

6. Discussion of the Results

The results of the model presented in Tables 2 and 3 are explained as follows. There is a negative

relationship between the regulatory authority's inefficiency and the shareholders' value. The value of the coefficient is -0.15, which shows that one percent decrease in the regulatory authority inefficiency

improves the shareholders' wealth by 0.15 units. The result suggests that regulatory authority efficiency plays a positive role in affecting the value of a firm in the selected financial markets accepting our hypothesis H1.

The effective regulatory control reduces the agency cost from these markets by improving the contracting system among the different players of the market. The majority shareholders are also restrained to expropriate the minority shareholders in the selected financial markets. The regulatory authority controls the adverse actions of the CEO, Chairman and board members in the firm reducing the misuse of excessive cash flow and principal and agent conflicts as suggested by Hanrahan et al. (2001). The result also endorses the accuracy of the conceptual framework in incorporating the important factors affecting the regulatory authority efficiency and the value of the firm relationship in these markets.

The result on the role of dual leadership structure in affecting the firms' performance shows that CEO duality affects the value of a firm in a positive manner. It suggests a non-existence of agency cost between the shareholders and the CEO in the selected financial markets as argued by Haniffa and Cooke (2002). The independent CEO is involved in the value creation of the shareholders by giving all the shareholders (minority and majority) equal rights in the strategic and financial decision making of the firm. In addition, the regulatory authority and the judiciary have controlled the value minimising actions of the majority shareholders and the CEO. The regulatory authorities can further improve the value of a firm by relating the incentives of the CEO to the performance of a firm as argued by Bhagat and Jefferis (2005).

The role of board size in affecting the firms' performance is also tested in this study. Board size does not play any role in affecting firm performance as the statistical result shows a lack of relationship between the variable and the value of a firm.

The result related to the role of debt in affecting the value of a firm shows that there is a negative relationship between high leverage and the value of a firm in the selected financial markets. This result is endorsed at a 5% significance level and shows that the agency cost between managers and creditors is not managed appropriately in these markets. The result further shows that free cash flow in the selected markets is not handled properly and is over-invested in preferred projects harming the firm's performance (Kyereboah-Coleman and Biekpe (2006), Black et al. (2006a), Leng and Mansor (2005), Nenova (2003)). The regulatory authority can decrease the agency cost of debt by disciplining the majority shareholders in these markets. The result also implies that disadvantages associated with debt are greater than its advantages contradicting MM hypothesis in the selected markets.

There is a positive relationship between the price to book value ratio and the value of a firm in these markets. This relationship shows that information efficiency leads to improvement in investors' confidence in the financial market. The coefficient of the variables is highest (49.03) among all the variables of the model endorsing that the information efficiency and investor's confidence are the most important factors in affecting shareholders' wealth in the selected markets. Finally, the positive relationship between the return on total assets and the value of a firm shows that the efficient or optimal utilisation of assets creates value for shareholders in developing and developed financial markets. The result supports the findings of Chen et al. (2007).

Conclusion

The current study has tested the role of regulatory authority efficiency in affecting the performance of a firm in both developing and developed financial markets. The result supports the stewardship theory and suggests that effective regulatory control improves the value of a firm by controlling the under and over-investment of the free cash flow in the selected financial markets. The use of debt in these markets is not healthy which implies that the external regulatory regime does not play an effective role in improving the value of a firm. The cautious regulatory control can minimise the agency cost of debt and reduce the bankruptcy risk from the market. This will result in bringing stability in the financial systems of these countries. Finally, the dual leadership structure, effective utilisation and correct valuation of assets improve the shareholders' value in these markets.

These results suggest that the additional imperfections in the developing markets do not limit the efficiency of the external regulatory regime and internal corporate governance instruments to add value to the shareholders in this market. The limitation of the study suggests that the role of regulatory authority in the insider system of corporate governance and under recession and boom in the economy can give us a new relationship of regulatory regime and the value of a firm with alternate policy implications.

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