

CORPORATE GOVERNANCE AND FINANCIAL PERFORMANCE: A REVIEW OF LITERATURE

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Corporate governance is a set of mechanisms that regulate the actions of corporate insiders and ultimately affects the corporate's financial performance. Corporate governance is significantly correlated with the financial performance. The extensive review of literature on corporate governance and corporate financial performance is organized into three main sections. The first section concentrates upon Clause 49 which is taken as a base for rating the corporates on the basis of their compliance to Clause 49 as a corporate governance mechanism. The second section consists of literature review on the dependent variables of firm's financial performance i.e. firm value, investment returns, and financial distress. The third section describes the measures of dependent variables of firm's financial performance (i.e. approximate Tobin's q, ROE, and Z score).

Key words : Corporate Governance, Corporate Financial Performance, Clause 49, Firm Value, Investment Returns, Financial Distress, Tobin's q, ROE, and Z score.

Introduction

Corporate Governance has become one of the most widely discussed topics in the business world which fascinate the researcher to enter the field. The genesis of corporate governance lies in business scams and failures. The failure of Maxwell, BCCI and Poly Peck in U.K. resulted in the setting up of the Cadbury Committee on Corporate Governance in 1991. The Cadbury Committee was appointed by the London Stock Exchange and Financial Reporting Council (Which is responsible for Accounting Standards in Britain) to look into the financial aspects of Corporate Governance. The report of the United Kingdom Committee on the Financial Aspects of Corporate Governance, chaired by Sir Adrian Cadbury, former chairman of Cadbury Schweppes and a director of the Bank of England, was published in 1992 (Cadbury 2002). The recommendations of the Cadbury Report influenced the development of corporate governance not just in the United Kingdom, but in many other countries, including Russia and India.

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The basic reason for creation of Cadbury Committee was the loss of confidence in reports and accounts of companies and the audit statements attached to them, following the collapse of some prominent companies. The cause of anxiety of the London Stock Exchange, and others, was not so much that these companies have failed as that their reports and accounts, just prior to their failure, appeared to give no forewarning of the true state of their financial affairs. The recommendations of the Cadbury Committee resulted in creation of the Code of Best Practices (published in 1992). The Code identified the ways of governance in order to achieve and maintain balance between *economic* and *social* goals and between *individual* and *community* goals. It laid emphasis on the fact that the success and growth of a company should no longer be measured by the magnitude of its operations and income earned by it but by the degree of adoption of good governance practices aiming at transparency in reporting and accountability to stakeholder. In the words of Sir Adrian Cadbury, Chairman Cadbury Committee, "exercise of power in a responsible way is good corporate governance."

The concept of Corporate Governance hinges on total transparency, integrity and accountability of the management. To quote J. Wolfensohn, former President of World Bank, "Corporate Governance is about promoting corporate fairness, transparency and accountability." Corporate governance focuses on building trust and confidence among all stakeholders, namely, shareholders, creditors, employees, consumers, suppliers and society at large. The guiding principle being "transparency and ethics" should govern the corporate world. Corporate governance, defined by Standard & Poor's as "the way in which a company organizes and manages itself to ensure that all financial stakeholders receive their fair share of a company's earnings and assets"

It needs to be emphasised that ethical conduct in business is an integral part of good governance. Those in charge of corporate governance should follow policies that establish a commitment to ethical standards, that is, being fair to all shareholders. The corporate goals have to be steered towards deeper, higher and more inclusive vision, values and ideas. For example, stakeholder value is a more inclusive ideal than shareholder value; ecological and social responsibility is a higher ideal than profit maximization for the company; innovation and knowledge management is a deeper and higher ideal than efficiency and productivity. Values which are in harmony with ethical conduct like fairness and justice in dealing with employee grievances, honesty and transparency in all dealings, mutual trust and goodwill in all relationships must be the guiding principles for effective governance of the organisation.

Thus, Corporate Governance implies commitment to values and ethical business

conduct and a high degree of transparency of management systems. The best practice of corporate governance will broadly include a code of best practices covering the constitution of the Board of Directors, its various Committees, defining their goals and responsibilities, exploring preferred internal control systems and disclosure requirements.

Good governance and corporate excellence are very closely connected concepts and in the long run, it is difficult to achieve excellence without good governance. Good governance is the means to the larger end of corporate excellence.

Review of Literature

A good number of research studies have documented a positive relationship between corporate governance and financial performance (Black, Jang, & Kim, 2003; Chhaochharia & Grinstein, 2007; Cremers & Nair, 2005; Gompers et al. 2003; Kohli & Saha, 2008), although other studies showed mixed or no relationships (Agrawal & Knoeber, 1996; Bhagat & Black, 2000; Demsetz & Villalonga, 2001; Lehn, Patro, & Zhao, 2005). But the positive impact of corporate governance practices on financial markets and stakeholders ultimately is a strengthened economy, and socio-economic development (De Nicolo, Laeven, & Ueda, 2006; Subrahmanyam, 2008). De Nicolo et al. (2006) showed that corporate governance practices have significant positive impact on real economic activity. De Nicolo et al. also reported in their study that good corporate governance practices have significant positive correlation with productivity growth, Gross Domestic Product (GDP) growth, and investment ratio to GDP. They argued that investors would be willing to pay a higher price for the stock of a corporation that practices good governance. Although the amount of premium varies from market to market, they found that in Asian countries it was found to be between 20-27%.

The positive effect of good corporate governance practices on economic growth and financial markets make economic sense because if corporate governance practices could affect individual firm's performance it would have an aggregate impact on the economy as a whole. Julien and Riegel, (2003), Mehta (2006), and Kohli and Saha (2008) all noted that good corporate governance practices help protect investors' rights and wealth through enforcement of laws and regulations. Kohli and Saha (2008) argued that corporate governance is particularly important for emerging economies where capital inflow is required for economic growth and development.

Good corporate governance practices can help promote global financial market integrity and efficiency (Subrahmanyam, 2008). Corporate governance framework leads to equity

market efficiency, innovation, entrepreneurship and economic growth. This suggests that if corporations have good governance practices, they will be able to attract equity and debt financing to help undertake research and support growth which will subsequently enhance the financial markets (Bernal & Lubrano, 2007; Cremers & Nair, 2005).

Although it is difficult to clearly define what a well-governed firm is, Gompers et al. (2003), Bebchuk et al. (2004), and Brown and Caylor (2004) found that firms that promote shareholder rights, have less management entrenchment, and independent board are well governed firms. Perhaps it is easier to identify and define bad governed firms by reversing these variables. Schlimm et al. (2010) found that bad-governed firms pursue strategies that do not fit the core business strategy, have excessive turnover in executive ranks, and have CEO as board chairman. Thus, corporations that do not have independent board, have less shareholder rights, and more management control will be considered bad governed firms.

Some studies have emphasized the need to examine critically board of directors, and corporate managers when it comes to governance issues (Aglietta 2008; Clark & Urwin 2008; Julien & Riegel 2003) because they influence corporate decisions and their actions or inactions can have significant effect on financial performance. Drucker (1954) argued that the long-term performance of a corporation is dependent on the quality of managers' decisions, skills and experience of board of directors and their commitment to apply sound management principles. Therefore, when analyzing the state of corporate governance for a given corporation an investor should examine the composition and independence of the board and integrity of corporate management. The analysis will help an investor examine whether the company is governed in a manner that will increase financial performance, and avoid financial distress or not. Lu and Chang (2009) argued that good corporate governance practices can help management provide quality financial information that will help guide against financial distress.

Gompers et al. (2003) studied the impact of corporate governance on firm equity value and found that stock returns of firms with good corporate governance practices outperformed on a risk-adjusted basis the returns of dysfunctional corporate governance firms. Gompers et al. concluded that corporate governance is significantly correlated with stock returns and investors earned on average 8.5% excess returns per year for investing in firms with good corporate governance structures. Thus, firms that promoted shareholder rights had higher earnings, and higher market values than those firms with weaker shareholder rights. Other studies on impact of corporate governance on financial performance although used other governance variables, reported a strong relationship

between corporate governance and equity values (Black et al. 2003; Brown & Caylor, 2004; Kohli & Saha, 2008). For instance Black et al. (2003) showed that a 10.0% increase in corporate governance index predicted a 6.0% increase in Tobin's q and 14.0% increase in market/book ratio in ordinary least squares regressions.

Agrawal and Knoeber (1996) however, had used different set of corporate governance variables on financial performance. The variables are shareholdings of insiders, institutional block ownership, leverage, managerial labor market, and market for corporate control and found relationship between corporate governance and firm performance except with institutional investors and outside directors. Thus corporate ownership, leverage and takeovers can be used to monitor corporate managers to enhance performance but not with institutional investors and external board members. According to Agrawal and Knoeber (1996) large institutional shareholders and board create its own agency problems and are not effective corporate governance mechanisms.

Bhagat and Black (2000) agreed with Agrawal and Knoeber (1996) and showed in their study that independence of board of directors does not help achieve improved profitability because of increase in agency and monitoring costs consistent with Coleman et al. (2005) and Miller (2009). These studies are inconsistent with other studies which showed that shareholder activism, large institutional shareholders, and independent board of directors can help a corporation achieve improve performance (Ferri & Sandino, 2009; Othman, Ponirin, & Ghani, 2009). The theory is that institutional investors do not fear risk-taking because they hold diversified portfolios that allow them to spread risks. As a result they are more willing to invest in corporations that pursue investment strategies that seek to minimize risk and maximize returns.

There have been numerous studies in the literature linking often governance variables such as audit committee, management and audit fees, governance ownership, female members of the board, leverage, dividend policies and external labour market on performance (Black et al. 2003; Martani & Saptura, 2009; Miller, 2009; Reddy et al. 2008). The findings have been inconclusive showing conflicting results. For example, Reddy et al. (2008) found that leverage has positive relationships with performance whereas Switzer and Tang (2009) found negative relation between leverage and performance especially for small businesses.

Compensation and incentive plans have also been considered in the literature as important corporate governance mechanisms that can be used to align management interest with that of stockholders to improve financial performance (Hawley & William, 1996; Narayanan, 1996). However, monetary incentives have a complex effect on

performance. Managers' value money as a strong symbol of their achievement and adequacy, but money may create dissatisfaction if they feel that it inadequately reflects their contribution (Sachau, 2007). According to Sachau (2007), hygiene factors including salary and compensation packages are extrinsic in nature and external to the job and may not affect performance, but rather help to explain job satisfaction. Chidambaran, Palia, and Zheng (2008) used pay-performance sensitivity to examine the impact of compensation packages on performance but found no significant relationship between compensation packages and financial performance. However, Yermack (2003) found a positive relationship between compensation packages such as stock options and corporations' investment opportunities and subsequent financial performance.

But stock options as a form of compensation have some limitations and may fail to help align managers' interests with that of the shareholders if corporate managers sell their stakes to a third party. And beyond a certain level of ownership interest management may become more entrenched (Rodriguez-Dominguez, Gallego-Alvarez, & Garcia-Sanchez, 2000). Thus, ownership interest may prevent corporate managers from being dismissed even if they attempt to satisfy their own interests.

The problem with corporate governance studies is that various governance mechanisms have haphazardly been used in prior studies with conflicting results. The studies are often influenced by researcher's interests, local legislations, securities regulations, and national cultures (Martani & Saputra, 2009). As a result, there are inconsistencies and lack of uniformity in the corporate governance literature. Current research studies on corporate governance have used governance mechanisms based on legislation. Their findings have been inconclusive showing conflicting results.

It emerged in the reviewed literature that prior to 2006 corporate governance studies showed much interest in shareholder rights with regard to mergers and corporate takeovers as evidence in Gompers et al. (2003), Bebchuk et al. (2005), and Brown and Caylor's (2004) studies. Not very much was discussed about the use of monitoring and incentives to reduce corporate scandals and excessive risk-taking.

Current research studies on corporate governance have used governance mechanisms based on legislation such as Sarbanes-Oxley Act 2002 (Miller, 2009; Miller, 2010) with the view of reducing agency costs and improving performance. But Aglietta (2008) argued that board of directors is the proper structure to lead good corporate governance. Aglietta believed that independence of the board, separation of board and CEO, shareholder activism, active inside audit committee, transparency and full disclosure of

information, and balance of power within corporations could reduce conflicts of interests and improve financial performance. Aglietta believed also that institutional investors have both financial and human resources to promote good corporate governance practices in corporations.

Although there is no proper model to guide corporate governance either based on legislations or internal controls, the correlation with social responsible investing is very clear. A study by Vivo and Franch (2009) showed an increasingly close link between social responsible investing (SRI) and corporate governance issues. Vivo and Franch argued that both SRI and good corporate governance practices aim at practices that encourage good corporate citizenship to maximize long-term rate of return and financial performance of shareholders' wealth.

The measurement of financial performance has also presented problems in corporate governance studies as several measures have been used. Although Tobin's q as a measure of market value and financial performance has received much attention in corporate finance literature, other measures such as ROA, ROE, sales growth and economic value added, EVA, equity prices, market value; EPS and profits have received some attention in modern Corporate Governance studies (Kohli & Saha, 2008; Martani & Saputra, 2009; Miller, 2009; Reddy et al. 2008, Switzer & Tang, 2009). It is unclear which financial performance variables relate strongly with corporate governance. Some evidence in the literature suggests that geographic location influenced corporate governance practices and research results (Chhaochharia & Laeven, 2009; Klapper, Laeven, & Love, 2006). Some research on impact of corporate governance and financial performance conducted in corporations in different countries showed different results due to cultural, financial accounting, legal and regulatory factors. Countries that operate in developed economies have good corporate governance regulations, diverse corporate governance practices and strong legal regulations and would rate higher than corporations in developing countries. In most developing economies, corporate governance regulations are weak or absent and there are haphazard corporate governance practices (La Porta, De-Silanes, Shleifer, & Visny, 2000).

According to Bris, Brisley, and Cabolis, (2008) corporate governance can be transferred from one country to another. Bris et al. asserted that Tobin's q of unmerged firms can increase when they are merged with or acquired by foreign firms that have good corporate governance practices. Bris et al. noted that transfer of corporate governance practice through cross-border merger is Pareto improving same as corporations that willingly adopt good governance practices.

Because of the inconsistencies in the literature some researchers have suggested an adoption of private equity corporate governance model (Alles, 2007; Wruck, 2008) to enhance performance in public corporations. Based on ideas of social learning theory researchers can find ways to test corporate governance models of private equity and venture capital funds to determine how they impact financial performance in public corporations.

1.1 Clause 49 of the Listing Agreement

As per Clause 49 of the listing agreement, all the stock exchanges are directed to amend their listing agreements with the revised clause 49. This revised Clause 49 also specifies the reporting requirements for a company. Accordingly, it is mandatory for all the listed companies to disclose the insights of their corporate affairs in their annual report in compliance to the disclosure criteria laid down in clause 49.

The provisions of the revised Clause 49 shall be implemented as per the schedule of implementation given below:

- a) For entities seeking listing for the first time, at the time of seeking in-principle approval for such listing.
- b) For existing listed entities which were required to comply with Clause 49 which is being revised i.e. those having a paid up share capital of Rs.3 crores and above or net worth of Rs. 25 crores or more at any time in the history of the company, by April 1, 2005.

Companies complying with the provisions of the existing Clause 49 at present (issued vide circulars dated 21st February, 2000, 9th March 2000, 12th September 2000, 22nd January, 2001 16th March 2001 and 31st December 2001) shall continue to do so till the revised Clause 49 of the Listing Agreement is complied with or till March 31, 2005, whichever is earlier.

1.2 Dependent Variables of Corporate's Financial Performance

Firm Value

Valuation is the process of estimating the amount for which an asset should exchange hands between willing parties in an arm length transaction, wherein the parties had acted knowledgeably, prudently and without any compulsion (Maliene, Deveikis, Kirsten, & Malys, 2010, p. 36). According to Maliene et al. (2010) valuation is mostly required for investment, accounting, insurance, taxation, and rating purposes. Kohli and Saha (2008)

considered market price, as set in the financial markets, as the best measure of value. However, it would be difficult to value firms or assets not listed in financial markets (Anderson, 2008; Artemenkov, Mikerin, & Artemenkov, 2008).

There are several concepts of value namely book values, market values, intrinsic and fair values or economic value that serve as a foundation for valuation models in investment analysis. Haugen (1986) distinguished between book value and market value. Haugen defined book value as the accountant's estimate of the value of equity holdings in a firm based on historical cost. It is an accounting book value of total assets of the firm, less claims on the assets. The problem with book value is that it does not reflect future growth prospects. On the other hand, economic value of an asset is the present value of the cash flows it is expected to produce (Fountaine et al. 2008; Stowe et al. 2002). The economic value should equal market value, which reflects the price investors are ready to pay for the asset and does reflect the characteristics and growth prospects of the asset (Stowe et al. 2002; Vogt & Vu, 2000).

For purpose of business valuation, Stowe et al. (2002) defined asset valuation as the estimation of an asset's value based on variables perceived to be related to future investment returns or on comparisons with similar assets (p. 2). According to Stowe et al. there is a difference between liquidated value and going-concern value. A liquidated value is the current value of a corporation if it is dissolved today without taking into account future cash flow expectations. It is what remains after deducting total liabilities from total assets. On the other hand, a going-concern value is the value of a firm under the assumption that the corporation will continue to maintain its business activities into a foreseeable future.

A firm's fair value is the price at which its assets would freely change hands between a willing buyer and a willing seller. The assumption is that the buyer and the seller are not under any influence of compulsion to buy or sell the asset (Stowe et al. 2002). As a result, fair value generally differs from market value, determined by the aggregate market participants. Behavioral finance theorists believe that prices are psychologically and emotionally influenced and as such do not reflect true value (Akhter & Misir, 2005; Salomons, 2008). Fundamental values determine a firm's fair or intrinsic value by considering the firm's financial, management, operating characteristics and growth prospects.

There are several fundamental valuation models used to estimate going-concern values of a firm including the use of price-multiples such as price-to-earnings ratio, price-to-sales ratio, price-to-book value, price-to-cash flow ratios, and discounted models (Lee, O'Brien, & Sivaramakrishnan, 2008; Stowe et al. 2002; Vogt & Vu, 2000). Using P/E for illustration, if P/E for a firm is \$10.00 per share and average earning per share (EPS) is 4,

the equity price is estimated to be \$40.00 and if shares outstanding is 100,000 then the firm value is $\$40.00 \times 100,000$ shares or \$4 million (Cheng, Hsieh, & Yip, 2007; Stowe et al. 2002). According to Cheng et al. (2007), total value of a firm relates to earnings and accounting methods. The problem with price multiples method of valuation is that they measure relative value and is influenced by accounting choices and measures (Fernandez, 2007; Stowe et al. 2002).

Dividend discounting model (DDM) values equities and other assets using dividend payments. For fixed income securities the dividend is replaced with fixed interest payments (Fabozzi, 2002; Hayes, 2006). It is useful in valuing companies that have a consistent dividend policy. The use of DDM, however, becomes problematic for corporations that do not pay dividends. Again, if the investor is an institutional such as a pension fund or mutual funds with intention of influencing or controlling the business the DDM is not appropriate because dividend is not the only source of payments (Stowe et al. 2002). It is possible to modify the constant growth assumptions in the model to account for dividend policy and growth rate changes.

Free cash flow (FCF) model uses cash flow available to shareholders after deducting operating expenses, interest payments, and investments in working capital and fixed capital (Stowe et al. 2002; Vogt & Vu, 2000). Generally, free cash flow model is appropriate to use if the business does not pay dividends or if dividends cannot be predicted (Stowe et al. 2002). If the company has negative cash flows through the valuation period the model cannot be used appropriately.

Vogt and Vu (2000) implied a positive relationship between stock prices of firms and positive cash flows as management increase dividend payouts to stockholders. However, if management fails to increase dividend payouts and spend free cash flow on unprofitable investments and perquisites, the free cash flow model predicts a fall in stock prices. The problem with discounted valuation model including dividend and free cash flow models is that it is difficult to accurately forecast streams of cash flows over long-term horizon. Again, the valuation model is very sensitive to quality of data inputs (Kumar & Krishnan, 2008; Stowe et al. 2002).

Residual income (RI), defined as earnings in excess of required rate of return on financial investment, may also be used to value equities (Anderson et al. 2008; Fountaine et al. 2008; Stowe et al. 2002). Fountaine et al. reported that economic value added (EVA) and market value added (MVA) based on residual income concept are useful in asset valuation. However, they considered economic value added as superior to

$$= (1.2703) * (1.10) * (0.8842) * (1.1786) * (1.0625)^{1/5} - 1 = 9.012\%$$

Where r is defined as the holding period return and n is the number of years the investment was held.

The geometric mean method is suitable for calculating returns over multiple holding periods (Bernstein, 1996; Reilly & Brown, 2003; Reilly & Norton, 1999). The arithmetic mean and geometric mean methods of estimating rate of return assume that the future economic condition is not going to be different from the previous years. In other words, there are no major changes in expected inflation rate, interest rates or government policies. However, if future macro-economic and micro policies turn out to be different from the past, then the expected rate of return might not be achieved. To address the problem of different future economic condition, investors calculate weighted expected rate of return by assigning probabilities to different economic scenarios for the future based on past experiences and judgment. The assumption is that economic conditions are going to be different from the past years (Bernstein, 1996; Reilly & Brown, 2003).

Knowing expected rate of return for individual securities can help an investor calculate expected rate of return on the entire portfolio using weighted average method. It also helps an investor to estimate future value of investments (Reilly & Brown, 2003).

Some investment practitioners use mode and median in estimating rate of returns. Mode is defined as the value of the observation or investment return that appears most frequently (Mason & Lind, 1990). Mason and Lind (1990) also defined the median as the midpoint of values after they have been ordered from the smallest to the largest or the largest to the smallest. The median is the midpoint value [s] as there are equal numbers of observations above and below the midpoint value in the data array.

However, for some investment data there is no mode of returns because no value appears more than once. Conversely, for some other data there might be more than one mode of returns. Again, both the mode and the median of returns are not good representatives for the entire investment data because the mode uses only the returns that appear frequently and ignores the other values. Similarly, the median uses the middle value [s] and ignores the rest of the data. Therefore in modern investment practice, the mode and median are rarely used in estimating expected rate of returns. Discounted models, market equilibrium and accounting measures of return are often used in practice to estimate equity returns.

The discounted cash flow models (DCF) can also be used to estimate investment returns by expressing the idea that an asset value is the present value of its discounted expected cash flows expressed as $\Sigma CF / (1 + r)^n$, where ΣCF is the sum of expected cash flows at time t , r is expected rate of return or the discount rate and n is years of investment (Stowe et al. 2002). Given all the inputs, the rate of return can be calculated from the formula. Rate of return is influenced by expected cash flows, current asset prices and expected price for the asset. The rate of return is positively related to cash flows such as dividend payments, future asset prices, but negatively related to current asset prices (Haugen, 1986, p. 105).

In market equilibrium models, a security will be expected to provide a return that commensurate with its market risk, measured by beta (Haugen, 1986; Reilly & Brown, 2003). One such equilibrium model is capital asset pricing model (CAPM) developed independently by Jack Treynor, William Sharpe, John Lintner, and Jan Mossin in the 1960s. The model is used to price risky assets by theoretically determining a required rate of return for the asset based on its relationship with market risk, beta.

The formula for CAPM is given as: $E(R_i) = R_f + [E(R_m) - R_f] \beta_i$, where $E(R_i)$ is the required rate of return on asset i , R_f is risk-free rate, and $E(R_m)$ is the expected overall return for the market portfolio, and β_i is beta coefficient of security i , a measure of market risk (Bernstein, 2007, p. 167; Reilly & Brown, 2003, p. 260). The greater the beta of a security, the greater the risk and the greater the expected return required (Reilly & Brown, 2003; Reilly & Norton, 1999). According to Reilly and Brown (2003) under market equilibrium, all portfolios would position on the capital market line (CML), and the required rate of return will equal investment rate of return. The use of market index such as S&P 500 index as the proxy of the financial market and the use of beta as a single measure of risk are considered as some of the limitations of CAPM (Reilly & Brown, 2003). An alternative model of asset pricing is Stephen Ross' arbitrage pricing model (APT). APT uses several risk factors including expected changes in level of inflation, unanticipated changes in the real level of GDP, unanticipated change in credit spread, and unanticipated changes in interest rates.

Financial Distress

A firm in financial distress does not have the financial ability to meet scheduled payments due to cash flow problems or permanent problem caused by declining asset

values below debt obligations (Brigham et al. 1999). Brigham et al. (1999) and Trussel and Patrick (2009) identified some causes of business failure as economic factors, financial, fraud, and treatment effect of corporate governance. According to Lu and Chang (2009), financial and corporate governance variables can better predict financial distress of companies' more than macroeconomic variables. Lu and Chang conducted a study on the relationship among financial distress, firm performance, and corporate governance using companies listed on the Taiwan Stock Exchange and found that the ability of a poor company to come out from financial distress depends on its corporate governance practices.

Although business failure is common with smaller firms, large firms also fail but governmental intervention and mergers are often used as an alternative to bail them out. Trussel and Patrick (2009) stated that the consequences of financial distress are disastrous since it may lead to discontinuity of operations, increase legal costs, administrative expenses as well as other indirect costs.

There are several studies in the body of corporate finance to predict firm failure. This is obvious because business failure has adverse consequences for the entire society. Huang and Huang (2010) explained that apart from the adverse effects of financial distress on corporations, financial markets also suffer. It is therefore necessary to assess financial conditions of a firm from time to time to assess its liquidity position. By predicting probable business failure of a corporation management and investors can take preventive measures such as instituting operational policy changes, reorganizing the firm's financial structure, going for voluntary liquidation, or adopting good corporate governance practices (Huang & Huang, 2010).

Vuran (2009) studied two predictive models of business failure using discriminant and logistic regression analyses. The findings of the study demonstrated that most of the failed firms showed signs of financial distress long before the failures actually occurred. Vuran showed that methodologies and models of predicting business failure include univariate and multivariate analysis. Univariate models include the use of financial ratios such as liquidity and coverage ratios to predict financial distress. But financial ratios are ineffective because they are unique to specified industries and provide information only in the context of comparison.

1.3 Measures of Dependent Variables of Financial Performance

Tobin's Q

Tobin's q, developed by James Tobin of Yale University, Nobel laureate in Economics has been used in corporate finance literature to estimate firm's value. Tobin's q is defined as the ratio of the market value of a firm to replacement value of its asset (Chung & Pruitt, 1994). According to Chung and Pruitt (1994), Tobin's q is calculated as the equity market value divided by replacement cost. The market value of equity is easily available but replacement cost is hard to obtain. Because of computational difficulty associated with Tobin's q, approximate Tobin's q using available financial information will be suggested to be used. Gompers et al. (2003) and Black (2003) used approximated Tobin's q to estimate firm value in their research studies. Other studies on firm value and performance have also used approximate Tobin's q as a proxy of market value (Agrawal & Knoeber, 1996; Brown & Caylor, 2004; Demsetz & Villalonga, 2001; Reddy et al. 2009; Switzer & Tang, 2009).

Chung and Pruitt (1994) and Balasubramanyan and Mohan (2010) had applied approximated Tobin's q using this formula: $MVE + PS + \text{debt} / TA$, where MVE, market value of equities is the product of a firm's share price and the number of common shares outstanding, PS is the liquidating value of the firm's outstanding preferred stock, Debt is the value of the firm's short-term liabilities, net of its short-term assets, plus the book value of the firm's long-term debt, and TA is the book value of the total assets of the firm. Without any preference stock issued by a corporation the formula becomes; $MVE + \text{Debt} / TA$.

If Tobin's q is less than 1, the market value is less than the value of the assets of the company and the firm may be undervalued. On the other hand, a high q (> 1) implies that a firm's market value is greater than the replacement cost of its assets, which means the stock is overvalued and presents better investment opportunities, higher growth potential and indication of good management performance (Wolfe & Sauaia, 2003). According to Wolfe and Sauaia (2003), this measure of firm valuation is the driving force behind investment decisions in Tobin's model. Tobin's q has predictive validity and very useful in financial and investment decisions.

Although other firm value measures such as Economic Value Added (EVA) have been used, approximate Tobin's q has become one of the most popular valuation methods in

the literature, perhaps because it is simple to calculate and easy to interpret. Tobin's q has been used in investment, tender offer responses, financing, compensation policies, diversification decisions and firm valuation (Chung & Pruitt, 1994). Perhaps due to difficulties in forecasting valuation inputs such as cash flows, growth rates, discount rates, and future dividend policies other valuation methods have been suggested.

Return on Equity

Accounting rates of return such as return on investments (ROI), return on assets (ROA), and return on equity (ROE) have been used in investment and corporate finance literatures to estimate rate of return for investors. According to White et al. (1998), ROI measures the relationship between profits or investment income and the total investments required to generate them. ROA, on the other hand, compares income with total assets (liabilities and equities) and it is appropriate as a measure of return for both equity and debt holders. ROE is the accounting rate of return available to equity holders and excludes debt in the denominator. It is calculated as Net income (NI)/ stockholders' equity (White et al. 1998, p. 168). Although, ROE is based on accounting profits, it is easy to calculate and it is used in practice to calculate return for equity holders. ROE has been used by the researchers as a proxy for investment returns.

Z-Score

Corporate governance is a set of mechanisms that regulate the actions of corporate insiders. Earlier researchers have identified a close relationship between poor corporate governance practices of firms and how it affects the basic structure of firm's performance and ultimately leads to financial distress. The evidence suggests that the variables taken for ratio analysis are positively related to the risk for financial distress. Generally speaking, firms with weak corporate governance are vulnerable to economic downturns and the probability of falling into financial distress increases.

Multivariate discriminant analysis (MDA) has been used in corporate finance to predict financial distress and corporate bankruptcies (Huang & Huang, 2010; Trussel & Patrick, 2009; Vuran, 2009). The multivariate discriminant analysis is a statistical technique similar to regression analysis. The objective of MDA is to construct a boundary line through a graph such that if a firm lies on the left of the line, it is not likely to be bankrupt whereas it is likely to go bankrupt, if it falls to the right. The boundary line, Z is called the

discriminant function, with the form $Z \text{ score} = a + b_1 (\text{current ratio}) + b_2 (\text{debt ratio})$. If the Z score is < 0 there is less than 50% chance of bankruptcy, if Z score is > 0 the probability of bankruptcy is greater than 50% but if Z score = 0 the company lies exactly on the line and it has 50-50% probability within the next two years to go bankrupt (Brigham et al. 1999, p. 982). Altman's study (as cited in Brigham et al. 1999) showed that MDA was used in a sample of corporations to predict corporate failures and bankruptcies with a success rate of 84%.

Tsai and Chang (2010) implied that Z score significantly predict financial distress but suggested the use of a two stage model to take into accounts macroeconomic variables. Although, Tsai & Chang suggestion makes economic sense, they have used Altman Z score as a proxy for financial distress because macroeconomic conditions generally reflect in firm's earnings before taxes, sales and total assets, the variables used in the construction of Z scores.

2.1 Conclusion

A good number of research studies have documented a positive relationship between corporate governance and financial performance. Corporate governance is significantly correlated with stock returns. Researchers have argued that investors would be willing to pay a higher price for the stock of a corporation that practices good governance. When it comes to governance issues, some studies have emphasized the need to examine critically board of directors, and corporate managers because they influence corporate decisions and their actions or inactions can have significant effect on financial performance. There have been numerous studies in the literature linking often governance variables such as audit committee, management and audit fees, governance ownership, female members of the board, leverage, dividend policies and external labour market with the financial performance.

Good corporate governance practices can help promote global financial market integrity and efficiency. If corporate governance practices could affect individual firm's performance it would have an aggregate impact on the economy as a whole. Therefore, positive effect of good corporate governance practices on economic growth and financial markets make economic sense. Earlier researchers have identified a close relationship between poor corporate governance practices of firms and how it affects the basic structure of firm's performance and ultimately leads to financial distress.

Generally speaking, firms with weak corporate governance are vulnerable to economic downturns and the probability of falling into financial distress increases.

Various governance mechanisms have haphazardly been used in prior studies with conflicting results. It is unclear which financial performance variables relate strongly with corporate governance. However, some evidence in the literature disclosed that geographic location also influence corporate governance practices. The studies are often influenced by researcher's interests, local legislations, securities regulations, and national cultures.

The measurement of financial performance is often a challenge in corporate governance studies. Researchers have utilised diverse measures for the purpose. Tobin's q as a measure of market value and financial performance has received much attention in corporate finance literature, other measures such as ROA, ROE, sales growth and economic value added (EVA), equity prices, market value; EPS and profits have also been used in modern Corporate Governance studies. Accounting rates of return such as return on investments (ROI), return on assets (ROA), and return on equity (ROE) have also been used in investment and corporate finance literatures to estimate rate of return for investors. While examining relationship between financial performance and corporate governance many researchers have used Altman Z score as a proxy for measuring financial distress; Z score indicates likely state of financial health (distress or otherwise). Examination of association of Z score with corporate governance is a robust evaluation of causality between financial performance and corporate governance.

Researchers internationally have evinced great interest in deciphering the influence of corporate governance on financial performance and the underlying process as is manifest in numerous studies undertaken on the subject. However, further investigation is required to understand the phenomenon at the level of measurement as also selection of variables. As a result, there are inconsistencies and lack of uniformity in the corporate governance literature.

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