Research Project Sponsored by NFCG

Final Report
DOES GOOD CORPORATE GOVERNANCE LEAD
TO ENHANCED BUSINESS VALUE?

Centre for Corporate Governance and Social Responsibility

International Management Institute Kolkata

2/4 C Judges Court Road, Alipore, Kolkata 700027
*IMI Kolkata is accredited as National Centre for Corporate Governance by
National Foundation of Corporate Governance (NFCG)*

This page has been intentionally left blank

INTRODUCTION

In modern society, the development of a country very much depends on its economic growth and prosperity. In turn, the economic growth rate of any country depends on the size of its capital market. Again, the capital market very much depends on the principles of accountability, fairness, transparency and responsibility of the business organizations. So, vital norms and regulations are required for controlling and overall supervision of the business houses to ensure their financial security. There should be some government laws or statutory bodies to oversee whether the corporate world are following such legal principles or not. It is in this context, that the term 'Corporate Governance' has emerged and also got entry into the vocabulary of both students and practitioners of business. To be more precise, it is due to the advent of Capital Markets and the subsequent dilution in the firms' ownership, that the concept of corporate governance has come into existence and prominence. Thus, it may very well be understood that corporate governance plays a crucial role in shaping the structure and function of an organization and also in setting the vision of the firm.

CORPORATE GOVERNANCE: THE CONCEPT

The concept of Corporate Governance has been shaped and reshaped in the hands of the academic scholars with the changing time. One of the earliest definitions of Corporate Governance has been given by Caramanolis-Cotelli (1995). Their paper puts stress on equity allocation both among outside investors and insiders comprising of CEOs, Directors, executives and corporate investors affiliated with management. According to Shleifer & Vishny (1997) corporate governance deals with the ways in which suppliers, providing finance to corporations, like to "assure themselves of getting a return on their investment". Zingales (1998) has defined "corporate governance" as "the complex set of constraints that shape the ex-post bargaining over the quasi-rents generated by a firm."

However, the most comprehensive definition of corporate governance has been given by John & Senbet (1998). They have proposed that "corporate governance deals with mechanisms by which stakeholders exercise control over corporate insiders and management such that their interests are protected". In this connection, they have also said that stakeholders not only include shareholders, debt holders but also the non-financial stakeholders such as employees, suppliers, customers and other interested parties. Rebeiz (2004) has also tried to give a consensual definition of corporate governance. According to him, it is an internal control mechanism to oversee or supervise the incentive, contractual and organizational schemes as put forth by the board of directors. Thus, the whole concept of corporate governance is to ensure managerial accountability and financial reporting trustworthiness and in this sense, the existence of this entity of corporate governance is simply enormous.

There are other definitions, too. Cadbury (2006, p. 18) defines corporate governance as 'the system by which companies are directed and controlled'. According to Ehikioya (2009), good corporate governance is possible only when the principles of fairness, accountability, transparency and responsibility are dealt with sincere focus and attention. Choi *et al.*, (2010); Liu (2012) demonstrate that there have been always a better chance and tendency towards powerful market exposure for those companies which have followed good corporate governance mechanism. Thus, the credibility of a firm depends highly on this very entity of corporate governance as it contributes highly to the legitimacy of a firm and the trustworthiness of its financial reporting.

CORPORATE GOVERNANCE & ITS SIGNIFICANCE

The financial crises and economic collapses around the world, since the past few decades, have led to an increased focus on the issue of corporate governance (Brown & Caylor, 2006). The beginning of the new millennium has witnessed a series of corporate fiascos like Xerox (2000), Enron (2001), Merrill Lynch (2002), WorldCom (2002), Lehman Brothers (2008), and Satyam Computers (2009). These black-listed companies and their malpractices have given a crucial signal to the corporates all over the world to think sincerely about the regime of corporate governance. Luo (2005a) and Epstein & Hanson (2006) echo the same and say that the cases such as Ahold, Parmalat and others have led to a renewed focus on corporate governance as a highly salient issue for international business. Thus, it has become evident that by setting a good governance policy – it will be possible to create shareholders' value as well as avoid management level corruption. So, there has been some substantial effort in this direction, but still there has been no stop to the long procession of scams and scandals.

Several studies by Levine and Zervos (1998), Rajan and Zingales (1998), Demirgu¨c-Kunt and Maksimovic (1998) have shown that the economic growth of a country depends on the size of the country's capital market. Thus, if corporate governance is weak then the capital market is thin which, in turn, leads to a slower economic growth rate. Therefore, strengthening the corporate governance system of a country is of utmost importance to achieve greater economic growth and prosperity.

In this connection, Mueller (2006) discusses the implications of the strength of corporate governance institutions, in which a company is located. He writes about the influence and ability of corporate governance on the fall in share prices when a company announces that it will sell shares to finance investments. He states that a company in a country with strong corporate governance institutions would suffer a smaller fall in share price, than a company in a country with a weak corporate governance institution. He concludes by saying that the best development strategy for an emerging market country would be to create strong corporate governance institutions that foster a right kind of ambience and produce a large equity market.

EVOLUTION OF CORPORATE GOVERNANCE IN INDIA: A BRIEF HISTORY

India has been a former British colony and as such the corporate law of India has a historical connection with British corporate law. In this backdrop, it has been noticed that there has been a socialistic approach with regard to Indian corporate law. So, the Indian business houses have been following a regime of central planning, permits and quotas for more than 40 years. But, the socialistic policies have never been very successful for the Indian companies and this led to the implementation of new policies of economic liberalization

during the early 1990s. New legal institutions are also being established in this context. These new regulatory institutions have been the pillars of renewed corporate governance standards.

The history of the development of Indian corporate governance norms has witnessed interesting contrasts. The government regulators and the private sector have, together, taken a number of initiatives, over the past two decades, to reform corporate governance norms and financial reporting in India. An overview of various such initiatives, taken to reform the corporate governance in India, is given below:

After facing the financial crisis in 1991, the Indian Government has undertaken a series of reforms aiming at the overall economic liberalization. It is important to know that, both the central and the various state governments have been going through a process of divestments, since the year 1991. It also needs mention that India's securities market regulator i.e. the Securities and Exchange Board of India (SEBI) has gained its statutory power in the year 1992 with an aim to " …to protect the interests of investors in securities and to promote the development of, and to regulate the securities market and for matters connected therewith or incidental thereto".

In India, the first major corporate governance reform proposal was launched by the Confederation of Indian Industry (CII). In the year 1996, the CII took a special initiative and formed a task force to deal with some major issues in the corporate sector such as public concerns regarding the protection of investors' interests, especially of the small investors; the promotion of clarity within business and industry; the need to shift towards international standards in terms of disclosure of information by the corporate firms and, no doubt, all these issues aimed at achieving a high level of public confidence in business and

industry. In 1998, this task force chaired by Rahul Bajaj issued a report entitled "Desirable Corporate Governance: A Code" which stated a series of voluntary practices for the listed companies.

Some major recommendations of this board are as follows:

- No need for German style two-tiered board. Thus, a single board is recommended.

- The board should meet at least six times a year, preferably at intervals of 2 months.

- For a listed company with turnover exceeding Rs. 100 crores, where the Chairman is also the Managing Director, at least half of the board should be Independent directors, else at least 30%.

- No single person should hold directorships in more than 10 listed companies.

- Non- executive directors should be active, competent and have clearly defined responsibilities in the board and in audit committee as their corporate decision making is likely to influence the maximization of long term shareholder value.

- At the time of re-appointment of the board members, the attendance record should be made explicit and those with less than 50% attendance should be barred from re-appointment.

- An audit committee with at least three competent non-executive directors is required for listed companies with a turnover over of Rs. 100 crores or paid-up capital of Rs. 20 crores.

- Key information that must be reported to, and placed before the board is listed in the code.

The second major initiative in the field of corporate governance was taken by the SEBI. In this connection, the East Asian financial crisis of 1997-1998 needs special mention which in

a way provides enough reasons for the urgent necessity of effective corporate governance in all the developing countries of the world (Krugman, 1994; Radelet and Sachs, 1998; Rasiah,1999). Quite similarly, Johnson *et al.*, (2000) emphasize on the fact that the Asian financial crisis of 1997-98 is largely due to the poor quality of corporate governance in most of the countries in the Eastern region of Asia. As a result of this enormous crisis, in 1999, the market regulators of India, was motivated to appoint a committee on corporate governance with 18 members under the chairmanship of Kumar Mangalam Birla. This Committee aimed at promoting and raising the standards of corporate governance in India.

Some major recommendations of this board are as follows:

- The board of directors of a company must have an optimum combination of executive and non-executive directors. The number of independent directors should be at least one-third in case the company has a non-executive chairman and at least half of the board in case the company has an executive chairman.

- The Birla committee defines independent directors as those directors who apart from receiving directors' remuneration should not have any material pecuniary relationship or transactions with the company, its promoters, its management or its subsidiaries, cause it may affect the independent judgement of the directors.

- The board should have an independent and qualified audit committee, with a minimum of 3 members, all being non-executive directors and at least one director should have financial and accounting knowledge. The audit committee specifically should function as a bridge between the board, the statutory auditors and internal auditors.

Thus, the Birla committee's recommendations were mainly focussed on two fundamental goals – improving the structure and function of the company boards and increasing disclosure to shareholders.

Another stepping stone, in the field of India's corporate governance, came about in early 2000, when the SEBI board accepted and ratified the major recommendations of the Birla committee. Thus, the guidelines provided by the SEBI have brought major changes in the listing requirements of the Indian stock exchanges. This was made possible by incorporating a new clause i.e. Clause 49 which stated clearly the new code on corporate governance. These reforms were applicable first to the newly-listed and large companies and then to the smaller companies and eventually to the vast majority of listed companies.

As a reaction to the Enron scandal (2001) and the adoption of the Sarbanes-Oxley Act in the United States, India witnessed the establishment of the Naresh Chandra Committee on Corporate Audit and Governance by the Department of Company Affairs (DCA) under the Ministry of Finance and Company Affairs in the year 2002. The two main recommendations on corporate governance, by this committee, are: financial and non-financial disclosures along with independent auditing and board oversight of management. It has also strengthened the definition of independent director in the then-existing Clause 49, in order to address the role of insiders on Indian boards. Thus, the new guidelines include: disciplinary mechanisms for the auditors, mechanisms to strengthen the corporate audits, functioning of audit and other sub committees of the board, together with CEO/CFO certifications about internal control and financial reporting.

The fourth initiative in this regard is the establishment of the Narayana Murthy Committee, by SEBI in 2003, to further enhance the clarity and integrity of India's stock markets and to

"ensure compliance with corporate governance codes, in substance and not merely in form".

Some major recommendations of this committee are:

- Training of board members are suggested.

- There shall be no nominee directors. All directors to be elected by shareholders with same responsibilities and accountabilities.

- This committee paid special attention to the roles and responsibilities of the audit committees. The audit committee should be composed of "financially literate" non-executive members, with at least one member having accounting or related financial management expertise.

- The "Whistle blowers" should have direct access to the audit committee, without having to inform their supervisors, at first.. All employees should be informed about such policy and this should be affirmed annually by the management.

On the basis of the Murthy Committee's recommendations, SEBI further amended the Clause 49 of the Listing Agreement in the year 2004. But, the implementations of these changes were delayed till early 2006, due to industry resistance and lack of preparedness to accept such wide-ranging reforms.

J. J. Irani Committee had been set up by the Ministry of Corporate Affairs (MCA) in December 2004, with the aim to revise the existing Companies Act of 1956. The reformations were based on the international standards of corporate governance keeping in view the needs of growing Indian economy. This committee was set up with the purpose to

evaluate the views of several stakeholders of India. The recommendations of this committee have gone a long way in laying the foundation of future corporate growth in India.

Beside other factors, it is basically on the recommendations of the Irani committee, that the proposed Companies Bill, 2008, sought to enable the Indian corporate sector to operate in a regulatory environment, characterized by best international practices, thus fostering that fosters entrepreneurship and investment. Though, the Companies Bill 2008 lapsed out due to the dissolution of the Fourteenth Lok Sabha, it was re-introduced unchanged, in the next year, as the Companies Bill 2009.

In the meantime, in January 2009, the Indian corporate community was shaken by the massive accounting scandal involving Satyam Computer Services Limited (Satyam). None of the corporate governance efforts could prevent the spectacular failure of Satyam, one of India's largest Information Technology (IT) companies. This prompted a quick action by the Indian government and consequently the insiders and auditors of Satyam were arrested and further investigation was done by the MCA and SEBI.

Shortly after the Satyam fiasco, in late 2009, the CII task force took initiative in listing recommendations for corporate governance reform. Additionally, in late 2009, the MCA released a set of voluntary guidelines for corporate governance, encompassing a myriad corporate governance matter including the responsibilities of the board of directors, board independence and the audit committee. In addition to the CII and the MCA, the National Association of Software and Services Companies (NASSCOM) also formed a Corporate Governance and Ethics Committee, under the chairmanship of N.R. Narayana Murthy. In mid-2010, the recommendations of this committee were issued and it focussed mainly on the audit committee, the whistle blower policy and improvement of shareholder rights.

All this have led to the introduction of the revised Companies Bill 2009, in the Lok Sabha on 14th December 2011, but were withdrawn by the Government on 22nd December and was sent back for consideration by the Standing Committee of Finance.

Finally, the Companies Bill 2012 gave way to the new Companies Act 2013, which replaced the Companies Act 1956, and came into force from 12th September 2013. The recently enacted Companies Act 2013 is forcing the adherence of higher independence standards. Moreover, the market regulator SEBI has recently taken the initiative to revise Clause 49 in accordance with the Companies Act 2013 and the same has been implemented from 1st October 2014.

The following timeline traces back the journey of evolution of corporate governance in India.

Evolution of Corporate Governance in India: A Timeline
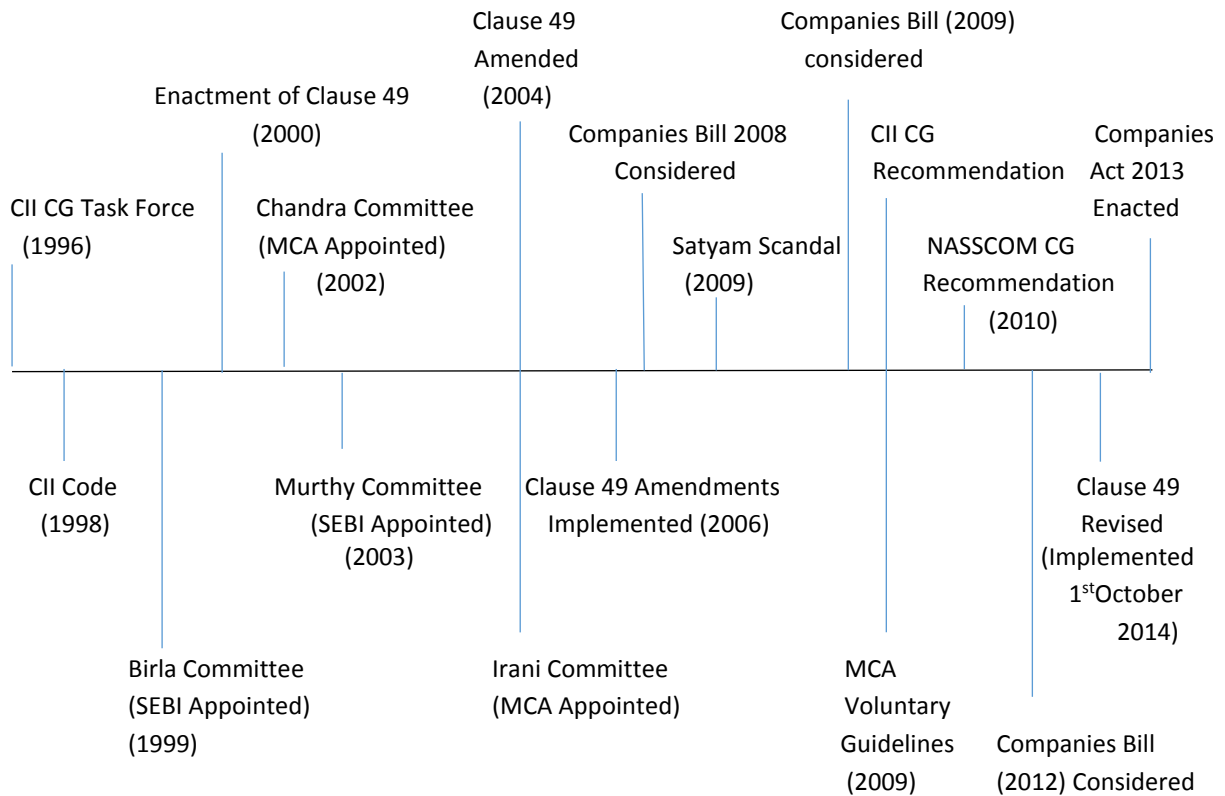
OBJECTIVE OF THE PRESENT RESEARCH:

The main objective of the present research is to empirically examine that whether good corporate governance variables leads to an enhanced business value of the firm or not. Thus, the objective is to assess the implications of firms' corporate governance practices and initiatives on business value generation through accounting and market related measures.

LITERATURE REVIEW

BOARD COMPOSITION IN RELATION TO FIRM PERFORMANCE

Board's Configuration or Boardroom Composition has become a major focus area in most of the literature of corporate governance. Many countries including the United States, the United Kingdom, Australia, Canada along with other European and Asian countries have adopted the unitary board model. Under this framework, the companies are flexible enough to choose the structure, membership and processes of their boards of directors. Derwent and Jones (1996) have shown that typically, a company has a single board that is composed of senior managers and outside directors, not affiliated with the firm.

In fact, directors who hold management positions are usually referred to as insiders or executive directors. The other directors, who are in no way associated with management, are known as nonexecutive or outside directors. The outside directors could further be classified as dependent or independent. Dependent outside directors or "gray directors" are usually referred to as "affiliated outside directors" and include the firm's lawyers and legal counsels, commercial and investment bankers, consultants, officers and directors of the firm's suppliers and customers, and interlocking directors. On the contrary, the concept of "independent outside directors" varies from one country to another and from one stock exchange to the next. The New York Stock Exchange defines an "independent director" as having no professional or personal links to the corporations other than their seat on the board for at least 3 years.

Keeping in pace with these wide variety and category of directors, in shaping the organizational structure and vision of the firm, it is important to determine the ideal nature

and quality of the directors best suited for a proper boardroom composition. In this connection, Dalton *et al.*, (1998) have stressed the fact that the optimum boardroom composition is dependent on the strengths and weaknesses of both the executive and independent non-executive directors. So, it is not quite easy to determine the correct proportion between the two categories of directors, while composing a boardroom.

BOARD COMPOSITION

Derwent & Jones (1996)	Single board is composed of senior managers & outside directors, not affiliated with the firm.
Dalton *et al.*, (1998)	The optimum boardroom composition is highly dependent on the expertise of both the executives and non-executive independent directors

BOARD INDEPENDENCE IN RELATION TO FIRM PERFORMANCE

Many empirical studies have put special stress on the impact of independent non-executive directors to the overall success of the firm. The two important studies, one by Fama (1980) and the other by Fama and Jensen (1983) are very much in accordance with this opinion. They have shown that, outside directors are considered to be important monitors of management, who play important role in effective resolution of Agency problems between managers and shareholders. According to them, the independent non-executive directors hold a more neutral position in comparison to the executive directors, who by taking advantage of their position often take decisions against the shareholders. They have further

stated that outside independent directors may act as shareholder's advocate to safe guard their interest.

Baysinger and Butler (1985) and Schellenger *et al.*, (1989) have also found evidences of positive relationship between firm performance and outside directors' representation on the board. Byrd and Hickman (1992) have echoed the same and argued that outside directors are more prone to effective monitoring and they objectively distinguish between good and bad decisions of the management and consequently, they potentially reduce the conflict between the shareholders and the management. Agrawal & Knoebar (1996), while supporting these findings have concluded that the outside directors can effectively monitor, protect and maximize shareholder's interest. Elloumi and Gueyié (2001) have also stated that firms, having greater proportion of independent directors on board, face less frequent financial pressure. In addition, Daily *et al.*, (2003) have noticed that when a business environment worsens, firms which have considerable number of independent directors have had lower probability of filing for bankruptcy.

According to the above findings, the credibility of corporate governance gets enhanced both within the organization and in the marketplace due to the autonomy of the boardroom. In fact, the latest corporate governance codes of best practices and stock exchange requirements are compelling the boardroom to achieve greater autonomy vis-à-vis management in a cross section of industries.

However, there are other opinions, too. For example, Vance (1978) finds that corporate performance is more influenced by the technical expertise and managerial experiences of the executive directors rather than any other attributes of the board. Again, Klein (1998) and Bhagat & Black (2002) have not found any association between board independence and long term firm performance.

BOARD INDEPENDENCE

Fama (1980), Fama & Jensen (1983)	Outside directors are important monitors of management; Independent non-executive directors, being neutral, act as Shareholder's advocate
Baysinger & Butler (1985); Schellenger *et al.,* (1989); Byrd & Hickman (1992)	Positive relationship between firm performance and outside directors
Agrawal & Knoeber (1996)	Outside directors can effectively monitor, protect and maximize shareholder's interest
Elloumi and Gueyié (2001); Daily *et al.,* (2003)	Increased proportion of independent directors in the boards leads to reduction of financial pressure and lowers the probability of financial crisis
Klein (1998); Bhagat & Black (2002)	No significant association between board independence and long term firm performance

FEMALE DIRECTORS IN RELATION TO FIRM PERFORMANCE

Many empirical studies have tried to find out whether there is a linkage between a board's performance and inclusion of a woman director as a member of the board. In this regard, Dutta and Bose (2006) are of the opinion, that the female members, on a board, reflect a diversified attitude of the board. Supporting such views, Smith *et al.,* (2006) have cited three different reasons for evaluating the significance of women on a board. First, female board members generally have a better knowledge and understanding of a market in comparison to male directors. As such, this understanding influence the decision making process of the board in a positive manner. Second, female board members tend to project better images of a firm, in the perception of the community and thus enhance a firm's performance. Third, when female board members are appointed, the male board members feel encouraged to have an in-depth understanding of the business environment. In addition, this study has

documented that women directors can positively affect career development of junior female staff in a business. Due to all these reasons, a firm's performance gets a positive boost, both directly and indirectly, with the presence of female members on a board.

However, more recently Adams & Ferreira (2009), in a study of US firms, have found that on an average, gender diversity has a negative effect on firm performance. Therefore, mandating of gender quotas, for directors can reduce firm value for well governed firms. But, in spite of this, they have shown that women directors significantly impact board inputs and firm outcomes. They also find that, since gender diverse boards spend more effort in monitoring, so CEO turnovers are more sensitive and vulnerable to stock performance.

BOARD DIVERSITY

Dutta and Bose (2006)	Presence of female members reflect a diversified characteristic of the board.
Smith et al. (2006)	Board diversity projects better image of a firm and enhance a firm's performance. Women directors are believed to have a better knowledge and understanding of a market, which helps the board in the decision making process. This, in turn, encourages the male directors to have an in-depth understanding of the business environment.
Adams & Ferreira (2009)	Women directors significantly impact board inputs and firm outcomes.

BOARD SIZE IN RELATION TO FIRM PERFORMANCE

The extent, by which the size of a board may affect the financial performance of a firm, has become a significant issue. In fact, ideal board size has been a matter of debate over several years.

According to Balasubramanian (1997), the board size of companies sees extreme variations across the countries. He finds that where, on the one hand, the average board size of a British company in 1996 was 7, and on the other hand some Japanese companies were having around 60 directors on their boards. The empirical literature shows a mixed evidence of the linkage between board size and corporate performance.

In this regard, Faccio and Lasfer (1999) report that, on average, non-executive directors make up 43 per cent of boards in the United Kingdom. Bhagat & Black (2002) document that most large US public companies have independent directors making up a high proportion of the board. Dwivedi & Jain (2005) explains that since, boards are considered as institutions to mitigate the effects of 'agency problems' existing in organizations, their size can affect board effectiveness.

In fact, the various studies on board size have revealed that there have been always two distinct schools of thoughts with regard to the size of a board and a firm's performance. The first school of thought are very much against a larger board size and they have put forth their valuable findings. In this context, O'Reilly *et al.*, (1989) have warned against large board size as it may create unnecessary frictions and disagreements among the board members. Similarly, Ward (1991) has given stress on the fact that the chance of arriving at a quick decision and preserve harmony is greater, if the board size is small. Agrawal & Knoebar (1996), have found a positive relationship between outside directors and firm's performance. But, still they have warned against the higher proportion of outside directors on the board of US firms. They have argued that an internal political process within firms may influence the selection of outside directors and as a result, the directors may be less effective or even may negatively affect the firm performance. So, this school of thought asserts that a smaller board size generally contribute more to the success of a firm (Lipton &

Lorsch, 1992; Jensen, 1993). The same has been echoed and proposed by various researchers such as Goodstein *et al.* (1994); Yermack (1996); Eisenberg *et al.*, (1998); Van-Ees & Postma (2002); Singh & Davidson (2003). These studies show that if the board size is larger, then the board of directors face more difficulty in communicating with each other. These findings give enough evidences that there is a negative relation between board size and corporate performance.

However, the second school of thought considers that a large board size will improve a firm's performance (Pfeffer, 1972; Klein, 1998; Coles *et al*., 2008). These studies indicate that a large board will support and advise firm management more effectively because of a broad business scenario and a cosmopolitan organizational culture (Klein, 1998). Some researchers such as, Pearce & Zahra, (1992); Dalton *et al.*, (1998) predict a positive association between board size and firm performance. Proponents, of this view, state that the quality of strategic decisions can be well improved when people from diverse backgrounds add their diversified knowledge and intellect to the board. Moreover, Dalton *et al.*, 1999 have concluded that a large board size will gather much more information and thus will eventually increase the firm performance.

Yet another view depicts an inverted "U" shaped non linear relationship between board size and corporate performance (Goilden & Zajac, 2001; Vafeas, 1999).

Board Size

Balasubramanian (1997)	The board size of companies sees extreme variations across the countries
Faccio and Lasfer (1999)	Boards in the United Kingdom on average have 43 % of non-executive directors
Bhagat & Black (2002)	Most large U.S. public companies have a high proportion of independent directors.

Dwivedi & Jain (2005)	Board Size is related to mitigation of 'agency problems'
O'Reilly *et al.*, (1989)	Large board size may create unnecessary frictions and disagreements among the members.
Ward (1991)	Small board size helps in arriving at a quick decision and preserve harmony.
Lipton & Lorsch, 1992; Jensen, 1993; Goodstein *et al.*, (1994); Yermack (1996); Eisenberg *et al.*, (1998); Van-Ees & Postma (2002); Singh & Davidson (2003)	A smaller board size generally contribute more to the success of a firm. In case of large board size, the board of directors face more difficulty in communicating with each other and as such there is a negative relation between board size and corporate performance.
Pfeffer, 1972; Klein, 1998; Coles *et al.*, 2008	A large board size with a cosmopolitan organizational culture will improve a firm's performance and also support and advise firm management more effectively.
Pearce & Zahra, (1992); Dalton *et al.*, (1998); Dalton *et al.*, 1999	A large board size gathers diversified knowledge and information and eventually increase the firm performance and as such there is a positive association between large board size and firm performance.

BOARD STRUCTURE IN RELATION TO FIRM PERFORMANCE

The two types of leadership structure in the boardroom configuration, which is at the top hierarchal level of the firm, have become an important topic of consideration in corporate governance. In the first model, the roles of CEO and Chairmanship to the board are combined and this joint or dual structure is very popular among the firms of the United States. The second model, where there is separate leadership structure dissociating the roles of the CEO and Chairman, is in great practice among many United Kingdom firms.

Though, there have been many empirical studies related to firm structure, it is a fact that such studies have failed to provide an agreed view on any contribution and linkage between a board's leadership structure and financial performance of a firm. Adding to the confusion, Berg & Smith (1978) find that there is no correlation between a firm's structure and its financial performance. Even, Rechner and Dalton (1989); Daily and Dalton (1992, 1993) have supported the fact that there is no notable effect of board leadership structure on a firm's performance.

Conversely, a study by Donaldson & Davis (1991) finds that joint structure achieves higher return on equity compared to separate structure. According to some supporters, this model provides a single focal point and a clear sense of direction and thus it helps the board to take faster decision. The consolidation of the two leadership roles gives assurance to the shareholders, employees and other stakeholders of the firm about the strength and stability of the board administration.

However, Fama and Jensen (1983), Jensen (1993) have shown that duality tends to reduce a board's supervisory power with regard to management related activities of a company, which in turn may result into an increase of agency cost. Similarly, Rechner & Dalton (1991) have observed that separate leadership structure outperformed those with joint structure, with regard to firm's financial performance. In another study, Chen, Lin & Yi (2008) have documented that in the period between 1999 to 2003, many business houses have converted their existing model of duality to a non-duality structure. Likewise, Dahya et al., (2009) have perceived that in the period between 1994 and 2003, 15 advanced nations along with the United Kingdom have followed the recommendation that a chairperson of a board should not be the same with the chief executive officer. Furthermore, Heidrick and Struggles (2009) have shown that 84 per cent of firms in Europe, follow the separate

structure of leadership for better performance of the firm. According to another study, by Hewa-Wellalage and Locke (2011), the best code for *corporate governance in* Sri Lanka is to minimize any one individual's influence while taking major decision and to emphasize the balance of power within a firm for ensuring an effective and efficient operation of a board. It is important to note that in Vietnam, Ministry of Finance (2012) has stipulated that a chairperson of a board should not hold the position of the CEO unless the shareholders approve this duality during the annual general meeting of the company.

In recognition of the importance of separation of responsibility between a chairman and a CEO, these authors consider that in many businesses with a duality structure, there has been an abuse of power at the expense of the company and the shareholders. These rules have provided a recommendation that when there is a duality in a firm, the number of independent directors on a board should be a majority so as to provide and maintain balance.

BOARD STRUCTURE

Berg & Smith (1978) Rechner and Dalton (1989); Daily & Dalton (1992, 1993)	No correlation between board structure and financial performance of the firm
Donaldson & Davis (1991)	The Joint/ dual structure achieves higher return on equity (ROE); and establishes the strength and stability of the board administration.
Fama & Jensen (1983), Jensen (1993)	Separate structure tends to reduce agency cost
Rechner & Dalton (1991)	Positive correlation between separate structure and financial performance of the firm.

INSTITUTIONAL SHAREHOLDERS: DOMESTIC AND FOREIGN IN RELATION TO FIRM'S PERFORMANCE

There have been many empirical studies on the importance of institutional shareholders or/and block holders, with regard to a firm's financial performance. Institutional shareholding is the percentage of equity shares of the company held by Financial Institutions (FIs). In other words, institutional shareholding is a development oriented business, such as state FI, industrial development corporation, mutual fund, bank or insurance company, which holds shares in a publicly-traded company. These are considered to be block holders and hence expected to have a better control on firm's management through higher representation in the company board, thus favourably affecting firm valuation. Institutional shareholders are important in placing new issues of stocks and bonds, as they can afford to buy more of an issue than individual investors. If an institutional shareholder owns a majority of the shares in a company, the company is said to be under institutional ownership.

Domestic shareholding comprises percentage of company's equity shares, owned by domestic institutional shareholders, whereas when the same is owned by foreign institutional shareholders then it is known as foreign shareholding. However, it is important to note that a country's financial system and legal provisions, regarding protection of shareholder rights, play an important role to establish a linkage between shareholding standard and a firm's financial performance.

Indian context: Dwivedi & Jain (2005) have made an in-depth research on the performance of Indian firms and their data corresponds to a panel of 340 large, listed Indian firms for the

period, 1997–2001, spread across 24 industry groups. The result of their study shows that foreign shareholding contributes positively toward the shareholder value, which means that the foreign institutional shareholders are in a better position to monitor the managers. This result emphasizes that a higher proportion of foreign shareholding is associated with increase in market value of the firm. In addition, their study also reveals that the association of Indian institutional shareholders with firms' market performance is not statistically significant. This means that Indian block holders cannot significantly exercise their control rights leading to better corporate performance. The problem with FIs in India may be attributed to the distorted incentives of government ownership and management of the FIs, and the state–business nexus that induces nominee directors to invariably vote with the promoters (Goswami, 2000). This can also be attributed to the fact that FIs in India, unlike their counterparts in the developed world, are also significant lenders to most of the listed companies in the country. In their paper Dwivedi & Jain (2005) have presented an interesting calculation regarding the Indian corporate sector. They have shown that the worst scenario for any enlisted Indian company would be where foreign shareholding percentage is less than the percentage of Indian shareholding, while the best scenario would be when foreign shareholding percentage is greater than the percentage of shareholding by the Indian institutional shareholders.

NUMBER OF BOARD MEETINGS IN RELATION TO FIRM PERFORMANCE –

Board meetings are arranged at regular intervals so that the directors and senior managers can sit together and talk about critical issues related to the company. These meetings provide a platform for comprehensive discussion and debate on subjects ranging from operational reviews to business cycle plans. This not only helps the board to gather

collective wisdom but also take value-added decisions. However, the number of meetings called in a year is an important factor. Too many yearly meetings may indicate that the board is over viewing detailed managerial activities of the firm, which is beyond its jurisdiction. Likewise, too less yearly meetings may indicate that the board is not handling governance issues with due importance. In order to strike a balance between the utility and functionality of the meetings, the number of meetings in a fiscal year should be proportionate. The effectiveness of board meetings depend not only on the optimum number of such meetings but also on the quality of discussion. These meetings should provide a meaningful forum of communication and conversation, giving stress on both form and substance. During the board meetings, there should be in-depth discussion encompassing the length and breadth of governance issues, so as to reach an optimal level of firm performance. In this way, an organization can promote its attractiveness and appeal to the highly accomplished outside executives.

Gregory & Simmelkjaer (2002) have shown that, on average, the European companies hold eight board meetings in a year. Moore (2002) has documented that the corporate firms in the United States hold six board meetings per year, in every alternate months. However, the corporate governance laws in the U.S. also allow occasional special meetings as per necessity. But, in connection to the financial performance of the construction firms in the United States, Rebeiz & Salameh (2006) have highlighted that there is no significant relationship between the financial performance and the number of board meetings held in a year.

So, in conclusion, it may be said that what matters most is the quality of discussions and decisions rather than the frequency of such board meetings. Again, it needs special mention

that in order to achieve value-added decisions, a board needs to be more balanced rather than being too reactive or passive in nature.

BOARD MEETINGS

Gregory & Simmelkjaer (2002)	The European companies, on an average, hold 8 board meetings in a year
Moore (2002)	The U.S. firms hold 6 board meetings per year in every alternate months and also allow occasional special meetings as per necessity.
Rebeiz & Salameh (2006)	No significant relationship between financial performance and number of board meetings per year.

PROMOTER SHAREHOLDING IN RELATION TO FIRM PERFORMANCE

One of the emerging issues in the finance literature is to evaluate the influence and impact of Promoters' Shareholding (McConaughy et al., 1998; Mishra et al., 2001) and corporate governance (Khatri et al., 2001; Kwak, 2003; Black et al., 2003) on overall firm performance. Due to the ever changing socio-economic structure across the world including developing countries like India, the ownership concentration in family controlled firms needs in-depth analysis and scrutiny.

Family controlled firm has been defined as a firm, where the promoter and associated family members need to hold 51% of shares at least, and the aforementioned percentage of shareholding cannot be lower in any condition and this basic criterion have been confirmed by McConaughy et al., (1998), Mishra and McConaughy (1999), Mishra et al., (2001) and

Chang (2003). Along this line of discussion, Anderson and Reeb (2003) have clarified that the promoter's family represents a unique class of shareholders. Being long term investors through multiple generations, they often hold senior management positions, in spite of their poorly diversified portfolios. So, in family firms the founder and his or her descends/accomplices hold not only a majority stake but also oversee the managing and controlling affairs of the firm.

Wide literature review gives enough evidences about the impact of family control on the firm's operation (Jensen and Meckling, 1976); on the firm value (Fama and Jensen, 1985); and also on its capital structure (Leland and Toft, 1986; Vries de, 1993; Randoy and Goel, 2000). According to Jensen and Meckling (1976), Fama and Jensen (1983), founding family leadership gives opportunities to the owners to supervise the overall management and to exercise full control over the paid executive directors of the board. Fama and Jensen (1983) have also argued that the long-term association of the promoter's family is highly beneficial for disciplining and regulating the managerial behaviour. In their study, Morck, Shelfier and Vishny (1988) have measured the firm value by Tobin's Q and showed that when the members of promoter family are in top positions of the firm, then it gives a positive boost to the firm's performance. Morck *et al*., (1988), Kang (1998), Mc Conaughy *et al*., (1998) have suggested that family controlled firms are much ahead in terms of performance and goodwill in comparison to firms with insignificant family control. James (1999) has noticed that how the affectionate and parent like attitude of the promoter's family creates and encourages an ambience of love and trustworthiness towards the business. There have been several other studies also, which document that concentrated ownership helps in more intense monitoring and ultimately results in better corporate governance (Hill and Snell, 1988; Weiss and Nikitin, 2004) and thus helps in curtailing of huge agency cost.

In spite of such positive aspects of family controlled firms, there are some research scholars who bear a negative view about ownership concentration by the founding family members. Demsetz (1983), Demsetz and Lehn (1985) and Slovin & Sushka (1993) have argued that there is no significant linkage between the level of family ownership and firm value. Moreover, there is an interesting observation in a study by Stulz (1988). He has shown a curvy-linear relationship between managerial ownership and firm performance. According to him, in the initial period, when ownership is more concentrated, then there is a decrease of monitoring cost, thus leading to an increased firm value. But with the passage of time, the value of the firm decreases as management becomes more insulated. Again, Morck *et al*. (1988) and McConnell and Servaes (1990) have discussed about a non-linear relation between insider ownership and firm value. In fact, Morck *et al*. (1988) have found a negative relationship between high-level board ownership and corporate performance through his "entrenchment argument" where the managers are so wealthy that they focus more on utility maximization by increasing market share and show no interest towards attaining maximum profit for the company. It is also noteworthy, that in family controlled firms there may be some threatening factors like family instability, lack of succession planning, etc., which may in turn, negatively influence the firm value (Demsetz 1983; Demsetz and Lehn 1985; Lauterbach and Vaninsky, 1999). Similarly, Bhagat *et al*., (2004), also do not support the view of a positive association between ownership concentration and firm performance.

The proposition that in the last few decades, firm's ownership structure is one of the most researched indicators of corporate governance has been supported by many scholars

(Morck *et al.*, 1988; Himmelberg *et al.*, 1999; La Porta *et al.*, 1999; Thomsen & Pedersen, 2000; Ramaswamy *et al.*, 2002).

PROMOTER SHAREHOLDING

McConaughy *et al.*, (1998), Mishra and McConaughy (1999), Mishra *et al.*, (2001) and Chang (2003)	In family controlled firms the promoter and associated family members need to hold at least 51% of shares and not less than that.
Anderson and Reeb (2003); Weiss & Nikitin (2004)	The promoter's family, being long term investors through multiple generations, often hold senior management positions. They not only hold a majority stake but also helps in intense monitoring of the firm. Thus, concentrated ownership helps in curtailing of huge agency cost.
Jensen and Meckling (1976), Fama and Jensen (1983)	The promoter's family not only exercises full control over the paid executive directors but also supervises the overall management. The long term association of the promoter's family is highly beneficial for disciplining and regulating the managerial behaviour.
Morck, Shelfier & Vishny, 1988 ; Kang 1998; McConaughy *et al.*, (1998)	The founding family, when in high positions, gives a positive boost to the firm's performance. So, such firms are much ahead in terms of

	performance and goodwill in comparison to firms with insignificant family control.
Hill and Snell, 1988	Concentrated ownership helps in more intense monitoring which ultimately results in better corporate governance.
James (1999)	Affectionate and parent like attitude of the founding family creates an ambience of love and trustworthiness towards the business.
Demsetz (1983), Demsetz and Lehn (1985) and Slovin & Sushka (1993); Lauterbach and Vaninsky, 1999	In family controlled firms there may be some threatening factors like family instability and lack of succession planning which may in turn negatively influence the firm value
Bhagat *et al*., (2004)	They do not support the view of a positive association between ownership concentration and firm performance.

AUDIT FIRMS IN RELATION TO FIRM PERFORMANCE

The auditors are the persons, who act as the gatekeepers as they are responsible for the security of the entire public market. As such they are often regarded as reputational intermediaries. In fact, it is the duty of the statutory auditors to uphold the integrity of financial information. The transparency of the auditors helps in fostering trustworthiness

among the investors, regulators and other stakeholders. However, it is to be noted that genuine independence is very much required for impartial performance of the auditors.

Size of the audit firm is an important factor, in the sense, that it is often cited as a good proxy for audit quality and dependability. Perhaps, this is the reason for the popularity of auditor concentration of 'Big Four' in the U.S. and the Western European countries. The Big Four audit firms are: KPMG, Ernst & Young, Deloitte and PricewaterhouseCoopers. Due to increasing integration of the global economy, IFRS has emerged as the common global standard which act as the common accounting language for the world-wide business community.

ACCOUNTING STANDARD IN RELATION TO FIRM PERFORMANCE

In the United States of America, the Securities and Exchange Commission (SEC)has highlighted the significance of an independent Audit Committee with a view to maintain the high quality and standard of financial reporting. In compliance with it, the U.S stock exchanges have made it mandatory that every listed company should have a minimum of three independent members in its audit committee. In the U.S. the accounting standard setting is delegated to the private sector as guided by the SEC. It is also to be noted that in the United States, since 1973 it is the Financial Accounting Standards Board (FASB) that has been setting accounting standards to be applied by the audit committees.

Indian Context: Following the footsteps of the United States, the Securities and Exchange Board of India (SEBI) has made it mandatory that every audit committee should have at least three members. But in contrast to the SEC, the SEBI requires only two-third of the audit committee to be independent. Again, in India the accounting standards are set by the

Government which takes input from professional regulatory bodies, industry associations, SEBI, Reserve Bank of India (RBI) and Comptroller & Auditor General.

OBSERVATION - But, in spite of the existence of numerous studies which investigate the relationship between the various corporate governance standards and economic/financial performance of the firms, these studies as a whole, often present conflicting results which do not clear the relationship between good corporate governance and firm performance.

SAMPLE AND DATA SOURCE

For the purpose of the study, we have selected the companies which are part of the CNX Nifty Index and are common for at least 3 years, out of the last 5 years (2010 to 2014). The sample has been further subjected to other screening criteria, that is, the elimination of Banking companies and Financial Institutions (FIs) as they follow a different accounting process and have a high degree of leverage thus making them outliers. Thus, the final sample contains 41 companies listed in the National Stock Exchange of India Ltd. For the corporate governance variables, we have tabulated the information from the Corporate Governance Reports contained in the Annual Reports of the sample companies. We have sourced these Annual Reports from the EMIS database, a Euromoney Institutional Investor Company. In addition to the data on board composition and director characteristics, it has become also necessary to acquire information on equity ownership, stock market details of companies and other financial variables for our analysis. We have obtained these data from the financial statements and the stock price information available in the Prowess database maintained by the Centre for Monitoring Indian Economy. The Prowess database has formed the basis of several published empirical studies on the Indian corporate sector (e.g. Khanna & Palepu [2000]; Sarkar & Sarkar [2000]; Bertrand, Mehta, & Mullainathan [2002]).

The list of variables and their definition are summarized in the following table:

List of Variables and Definitions

Variable Name	Definition
Maj_indep_board	Majority Independent board. Dummy variable. Equals one if the percentage of independent director exceeds 50, 0 otherwise.
Brd_busyness	Board Busyness. Dummy variable. Equals one if the board has at least one independent director with three or more directorships, 0 otherwise.
Brd_diligence	Board diligence. Calculated as mean of percentage of board meetings attended by independent directors.
CEO_duality	CEO duality. Dummy variable. Equals one if the CEO is also the chairman of the board, 0 otherwise.
DII_share	Domestic institutional investors' share. Percentage of equity owned by Indian banks and insurance companies, Indian financial institutions and Indian mutual funds.
FII_share	Foreign institutional investors' share. Percentage of equity owned by institutional investors that are not domestic institutional investors.
Group	Dummy variable. Equals one if the company is affiliated to a business group, 0 otherwise.
Brd_size	Size of the board. Total number of directors on the board at the end of the financial year.
Per_brd_meeting	Percentage of board meetings attended by the board of directors. Calculated as average number of board meetings attended divided by maximum number of board meetings.
Avg_num_directorships	Average number of other directorships held by the board of directors. Equals to average number of other directorships held in other companies by all the directors who are on the board till the end of the financial year.
Promoter_shares	Percentage of shares held by the promoters. Equals to the percentage of shares held by the promoters.
Auditor	Dummy variable. Equals to one if auditor is among top four audit companies, 0 otherwise.

VARIABLES

The various financial measures, used in the study to measure firm performance, are grouped into two broad classes:

Accounting Based Measures	Market Based Measures
• Economic Value Added (EVA) • Return on Assets (ROA) • Return on Equity (ROE)	• Market Value Added (MVA)

The list of Accounting Based Measures and their definition are described below:

ECONOMIC VALUE ADDED (EVA)

Nowadays, every organization aims at better performance and thus tries to maximize shareholders' wealth. In this context, *Stern Stewart & Co.* has developed the concept of Economic Value Added (EVA) which is a particular method of calculating economic profit.

EVA is defined as any profit earned over and above the cost of capital. It is a measure of economic profit, which is arrived at by considering the charge for the opportunity cost of all capital invested in the company. Thus EVA represents the estimation of true economic profit, which means the amount of earnings exceeding or falling short of the required

minimum rate of return, which the shareholders and lenders could obtain by means of investing their capital in other alternatives, having similar degree of risk. The amount of economic value addition is determined by comparing a company's earnings after tax and the cost of capital employed. If the former exceeds the latter, the result is positive economic profit and in the reverse case, negative economic profit will exist. The positive value of EVA is an indication of value creation or surplus generation by the company and the negative EVA signifies that the company is not creating value or generating surplus. The use of economic value added concept is claimed to be the most dynamic and much better approach for measuring value creation or surplus generation by a company, since EVA focuses on clear surplus in contrast to the traditionally used profit available to the shareholders.

The EVA is computed by using the following formula:

The EVA = $(NOPAT)_t$ – WACC × $(CE)_t$

Where, $(NOPAT)_t$ denotes net operating profit after tax, WACC indicates weighted average cost of capital, and $(CE)_t$ stands for capital employed at the end of period t.

The computation of EVA involves calculation of three important things:

(a) Net Operating Profit before interest but after tax, (b) Weighted average cost of capital and (c) Amount of capital employed.

The computation of weighted average cost of capital (WACC) involves the calculation of cost of equity (K_e) and cost of debt (K_d). According to Stern Stewart's recommendations, cost of equity (K_e) should be computed by using Capital Asset Pricing Model (CAPM).

Studies on Capital Asset Pricing Model (CAPM)

With the publication of the theoretical work of **Markowitz (1952)** on mean-variance approach to portfolio management, this line of research work was started. **Sharpe (1962)** later developed Markowitz's mean-variance efficiency theory. Afterwards, **Sharpe (1964)** and **Lintner (1965)** developed the Capital Asset Pricing Model (CAPM) in order to ascertain the systematic risk (beta) of a security from the market portfolio. Sharpe first categorized risks, attached to a security, into systematic and unsystematic components and introduced the concept of market line.

In 1990, the Nobel Foundation Committee awarded the Nobel Prize in the field of economic science to both **Markowitz (1991)** and **Sharpe (1991)** together with Merton H. Miller for their pioneering contributions to the portfolio theory. **Miller (1991)** was, however, awarded the Nobel Prize for his valuable contributions towards 'leverage'.

Umstead and Bergstrom (1979) made an effort to estimate portfolio betas under dynamic situations. After that many other researchers further developed, extended, tested and applied this model in order to solve various practical issues. Foster (1978) supported the CAPM after testing this model on New York Stock Exchange (NYSE) monthly data, over the period from 1931 to1974. **Chen *et al*., (1986)** made an effort to measure the market power of a firm. **Mackinlay (1987)** performed multivariate tests for the CAPM. **Change & Pineger (1987)** undertook the effort to estimate the effect of risk difference on the off documented negative relationship between inflation and stock returns. **Chung (1989)**, through empirical investigation, showed that a significant option of the cross-sectional variation in beta could be explained by the cross- sectional differences in the demand beta, which denotes firm's

intrinsic business risk in the output market and the degrees of financial and operating leverages.

Mackinlay & Richardson (1991) undertook tests of unconditional mean-variance efficiency under weak distributional assumptions. The researchers used a generalized method of moment's framework by considering returns for size-based portfolios, for the period from 1926 to 1988. They opined that the mean-variance efficiency of market indices was sensitive to the test undertaken. After analyzing the data of German Stock Market, **Sauer & Murphy (1992)** established that the original CAPM is the best explanatory model rather than **Ross's (1976)** Arbitrage Theory of Pricing (ATP) model and consumption CAPM.

According to the CAPM, the expected return on equity (K_e) is given by the following equation:

$$K_e = R_f + \beta (R_m - R_f)$$

Where, K_e represents cost of equity,

R_f stands for risk free rate of return and

R_m indicates the market return.

RISK FREE RATE

The risk free rate of return indicates the return which can be obtained without bearing any risk. This means that complete certainty prevails in respect of such return. Bank rate is popularly taken as the risk free rate. Here in this study, *10 year Treasury Gold Bond yield rates* collected from the Treasury Division of the RBI have been assumed as the risk free rate of return.

The computation of EVA involves the computation of market return, which may be defined as average return available from the market and is calculated on the basis of available market return. Market return may be delivered on the basis of daily, monthly, quarterly or yearly data of either BSE Sensex or Nifty of NSE. From the stock market, daily index data are available in four different forms like opening, high, low and closing. For computing market return, this study has considered closing index, which is derived on the basis of closing prices of the constituent shares available in the index.

In order to analyze risk containment measures in Indian stock index futures market, **J.R. Verma Committee** used data for the period from 1st July, 1990 to 30th June, 1998. The main objective of considering such a long sample period was to take into account full business cycles that cover more than two interest rate cycles and also two stock market cycles. This implies that for the purpose of deriving market return, abnormality in the market index should not be eliminated, rather it should be filtered by means of increasing the sample size.

Mallik and Rakshit (2005) conducted a study, where they computed annualized daily return, annualized weekly return, annualized monthly return, annualized quarterly return and yearly return. They derived such returns on the basis of BSE Sensex data, since it is the oldest index in the country and, at the same time, most reliable also. They observed wide fluctuations in such returns which are shown in the following table:

Table: BSE Sensex Based Market Return

Year	Daily	Annualized Daily Return (%)	Weekly	Annualized Weekly Return (%)	Monthly Return (%)	Quarterly Return (%)	Yearly Return (%)
1991-92	214	231.85	50	145.75	148.08	182.42	266.54
1992-93	191	(105.23)	46	(62.29)	(54.95)	(54.58)	(46.78)
1993-94	219	90.80	46	63.44	56.43	55.74	65.71
1994-95	231	(20.86)	51	(11.14)	(13.04)	(12.33)	(13.71)
1995-96	242	15.14	48	5.11	5.99	-	3.24
1996-97	242	5.24	49	13.02	2.51	(2.08)	(0.17)
1997-98	242	25.70	49	12.44	19.03	18.48	15.82
1998-99	239	0.77	51	(1.18)	(0.63)	(0.17)	(3.92)
1999-00	242	49.60	48	41.93	33.40	30.75	33.73
2000-01	252	(39.04)	48	(24.89)	(28.71)	(31.06)	(27.93)
2001-02	247	0.06	49	1.30	(1.56)	(0.38)	(3.75)
2002-03	249	(18.29)	49	(10.52)	(10.97)	(11.11)	(12.12)
2003-04	254	90.55	52	62.60	62.28	66.20	83.38

2004-05	253	25.62	52	14.99	15.02	16.55	16.14
2005-06	249	82.96	52	56.84	56.58	57.78	73.38

Source: Mallik, A. K and Rakshit, D. (2005): "EVA Based Segmental Reporting: A Case Study", *Research Bulletin*, Vol. No- XXVI, Pp-12-27.

Such wide fluctuations in market returns were caused mainly due to the existence of high volatility of share prices in the stock market. Due to the existence of high degree of volatility in the market return, the same could not be used as reference return in order to derive cost of equity and as such, while deriving the cost of equity by applying the market model, a company should take into account a long-run view so that the market return can reflect long-run average return in the stock market.

In the present research work, the computation of market return has been made in a different way. First of all, for computing market return, data of NSE Nifty are considered. This is so, because at present, the volume of turnover of NSE is significantly higher than that of the BSE. Thus, consideration of NSE data will facilitate better reflection of the pulses of the Indian capital market. Secondly, in order to eliminate the volatility of annualized daily market return, the present study has used the logarithmetric difference of closing NSE nifty of two successive periods for the calculation of market return. If X_t be the closing Sensex on date t and X_{t-1} be the same for its previous business day, then the one day market return is calculated by using the following formula:

$$MR_t = L_n (X_t / X_{t-1}) \times 100$$

Where L_n is the natural logarithm.

Thus, the market return will be computed on the basis of the logarithmic values of the closing Sensex, instead of taking just the closing Sensex data.

BETA

Beta (β) is basically used as the risk indicator in the market model. It is generally defined as the responsiveness of stock return or portfolio return to the market return.

Beta (β) for any asset, may be calculated as:

$$\text{Beta} = \frac{\text{Covariance } (\tilde{A}_i, \tilde{A}_m)}{\text{Variance } (\tilde{A}_m)}$$

Where, $\tilde{A}_i$ = Return from a given investment

$\tilde{A}_m$ = Return from the market portfolio

Covariance $(\tilde{A}_i, \tilde{A}_m)$ = [Correlation $(\tilde{A}_i, \tilde{A}_m)$] $\times$ [Standard deviation of $\tilde{A}_m$ / Standard deviation of $\tilde{A}_i$]

And here tilde ($\sim$) indicates that the respective measure is specific as a random variable.

In other way, it may also be written as:

$$B_{im} = Cov_{jm} / \delta^2_m$$

Where Cov_{jm} represents covariance of return of individual share i with index return m and δ^2_m denotes the variance of market return.

Cost of Debt (K_d)

Hence, effectively cost of debt is calculated as

$K_d = I(1-t)$

Where K_d implies cost of debt, 'I' stands for rate of interest on debt and 't' is rate of tax. Thus, it is the measure of after tax cost of borrowed capital or debt capital.

Computation of Weighted Average Cost of Capital (WACC)

The term 'cost of capital' basically implies the overall composite cost of capital, defined as weighted average of the cost of each specific source of capital. The use of weighted average over the simple average is preferred, because of the fact that the proportion of various sources of fund in the capital structure of a firm is different. Therefore, to be representative, the relative proportions of different sources should be taken into consideration for computing the Weighted Average Cost of Capital (WACC).

Thus the computation of WACC usually involves the following steps:

    I.   Assigning weights to specific costs.

    II. Multiplying the cost of each specific sources of fund by the appropriate weights.

    III. Dividing the total weighted cost by the aggregate weights.

Symbolically, WACC can be computed as follows:

WACC = (P$_e$ × K$_e$) + (P$_d$ × K$_d$) + (P$_p$ × K$_p$)

Where, K$_e$ is the cost of equity, K$_d$ implies cost of debt, K$_p$ stands for cost of preference share capital and P$_e$, P$_d$ and P$_p$ denote the proportion of equity capital, debt capital and preference share capital respectively. In this case, the book value weights have been taken into consideration and not the market value weights or marginal weights.

RETURN ON ASSETS (ROA)

Return on Assets (ROA) is an indicator of how profitable a company is, relative to its total assets. The measure of ROA gives an idea as to how efficient management is, at using its assets to generate earnings.

ROA is expressed as percentage and calculated as:

Return on Assets = Net Income/Total Assets

RETURN ON EQUITY (ROE)

Return on Equity (ROE) is the ratio of net income of a business, during a year, to its stockholders' equity during that year. It is a measure of profitability of stockholders' investments. It shows net income as percentage of shareholder equity. ROE is an important measure of the profitability of a company.

ROE is expressed as percentage and calculated as:

Return on Equity = Net Income/Shareholders' Equity

The name of Market Based Measure and its definition is described below:

MARKET VALUE ADDED **(MVA)**

According to Stewart (1991), the market value added (MVA) may be defined as the excess of market value of firm's capital (both equity as well as debt) over its book value. In other words, it is the spread between company's market capitalization and book value of capital. When market value of capital is greater than its book value, MVA becomes positive which indicates creation of wealth for the shareholders. As per Stewart, MVA should be calculated as:

MVA = Market Capitalization – Equity

Where, Equity = Equity share capital + Reserve & Surplus – Miscellaneous expenses – P&L (dr.) balance.

CONTROL VARIABLES

Apart from the governance characteristics, the performance of a firm is influenced by other factors as well. Thus, it is customary to control the effect of these external factors and so the variables such as financial leverage, natural log of total assets or size of the firm and firm's age are considered as the control variables in this study.

Financial Leverage is the ratio of long-term debt to total equity plus retained earnings. The variable captures the effect of corporate tax shield (Sarkar & Sarkar, 2000).

Natural Log of Total Assets is defined as the size of the firm. It reflects the effects of unobserved factors, which are related to size.

Age is defined as the log difference between end of 2014 and firm's founding year. It controls for the life cycle effect because profits of older and matured firms may be increased on account of good will and learning efforts (Black *et al.*, 2003).

Thus, the 4 main models of regression that we estimate takes the following form:

EVA = α + β_1 Maj_indep_board + β_2 Brd_busyness + β_3 Brd_diligence + β_4 CEO_duality + β_5 DII_share + β_6 FII_share + β_7 Group + β_8 Brd_size + β_9 Per_brd_meeting + β_{10} Avg_num_directorships + β_{11} Promoter_shares + β_{12} Auditor + β_{13} Leverage + β_{14} Log of TA + β_{15} Age + error   [Equation 1]

MVA = α + β_1 Maj_indep_board + β_2 Brd_busyness + β_3 Brd_diligence + β_4 CEO_duality + β_5 DII_share + β_6 FII_share + β_7 Group + β_8 Brd_size + β_9 Per_brd_meeting + β_{10} Avg_num_directorships + β_{11} Promoter_shares + β_{12} Auditor + β_{13} Leverage + β_{14} Log of TA + β_{15} Age + error   [Equation 2]

ROA = α + β_1 Maj_indep_board + β_2 Brd_busyness + β_3 Brd_diligence + β_4 CEO_duality + β_5 DII_share + β_6 FII_share + β_7 Group + β_8 Brd_size + β_9 Per_brd_meeting + β_{10} Avg_num_directorships + β_{11} Promoter_shares + β_{12} Auditor + β_{13} Leverage + β_{14} Log of TA + β_{15} Age + error   [Equation 3]

ROE = α + β_1 Maj_indep_board + β_2 Brd_busyness + β_3 Brd_diligence + β_4 CEO_duality + β_5 DII_share + β_6 FII_share + β_7 Group + β_8 Brd_size + β_9 Per_brd_meeting + β_{10} Avg_num_directorships + β_{11} Promoter_shares + β_{12} Auditor + β_{13} Leverage + β_{14} Log of TA + β_{15} Age + error   [Equation 4]

Where,

α = the intercept

RESULTS AND DISCUSSION

For the purpose of the study, four different Regression Models have been applied by using four different Dependent Variables. The Dependent variables are Economic Value Added (EVA), Market Value Added (MVA), Return on Assets (ROA) and Return on Equity (ROE). EVA and MVA are said to be the modern tools to assess financial performance, whereas ROA and ROE are the traditional measures of financial performance.

REGRESSION MODEL 1: EVA as the Dependent variable

In order to find out which regression model is appropriate, Hausman test is performed. As per the Hausman test, the hypotheses are:

Ho: Random effect model is appropriate.

Ha: Fixed effect model is appropriate.

Table 1 shows the results of Hausman test:

TABLE 1: Hausman Test

EVA	Coefficients	Coefficients		
	(b)	(B)	(b-B)	sqrt(diag(V_b-V_B))
	fixed	random	Difference	S.E.
LEVERAGE	-99940.54	-61528.68	-38411.86	33094.28

LogofTA	14652.57	-11496.12	26148.69	12237.3
AGE	-4218.967	38.49308	-4257.46	2230.621
MajIDBrd	5088.993	417.7981	4671.195	2108.337
BBusyness	2549.262	-6579.428	9128.69	5995.018
BDiligence~n	-79.73659	-212.1428	132.4062	64.3814
CEODuality	-1190.964	681.7013	-1872.665	2560.198
DIIShr	1528.319	875.6455	652.6739	726.6867
FIIShr	2906.094	1667.461	1238.633	705.8106
BSize	-2016.708	114.3081	-2131.016	882.4115
fBM	155.9023	317.3866	-161.4843	86.85566
AvgNoDirct~p	3747.328	2977.249	770.0792	1639.855
PrmtrShrs	1618.945	888.2056	730.7392	756.9411
AudtrBig4	11265.32	-6488.369	17753.69	14733.62

b = consistent under Ho and Ha; obtained from xtreg
B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Chi2(14) = 16.86
Prob>chi2 = 0.2635

The result of the Hausman test shows, that the null hypothesis is accepted. Thus, the

Random Effect Model is appropriate. Hence, the regression results of the random effect

model is presented below in Table 2.

TABLE 2: Random Effect Model Regression Results

EVA	Coefficient	p-value
Constant	72188.42	0.360
Leverage	-61528.68**	0.020
Log of TA	-11496.12**	0.016
Age	38.49308	0.846
Maj_indep_board	417.7981	0.926
Brd_busyness	-6579.428	0.612
Brd_diligence	-212.1428	0.259
CEO_duality	681.7013	0.892
DII_share	875.6455	0.275
FII_share	1667.461*	0.009
Group	-28971.21**	0.018
Brd_size	114.3081	0.914
Per_brd_meeting	317.3866	0.244
Avg_num_directorships	2977.249***	0.101
Promoter_shares	888.2056**	0.043

| **Auditor** | -6488.369 | 0.509 |

*denotes statistical significance level of 1%
**denotes statistical significance level of 5%
***denotes statistical significance level of 10%

Number of obs = 203
Number of groups = 41
Wald chi2 (15) = 37.84
Prob > chi2 = 0.0010

Regression Results of Model 1:

Table 2 reports the results of Random Effects Regression only. It reveals that amongst the control variables, the two variables, Leverage and Size of the firm are found to be statistically significant at 5% level. Here, the coefficient of Leverage (-61528.68) and Size of the firm (-11496.12) appears to be negative. This indicates that leverage and size of the firm are likely to have a negative impact on the EVA of the company. If the degree of leverage increases, financial risk is also likely to increase because of which the Weighted Average Cost of Capital (WACC) and the Cost of Capital Employed (CE) are also likely to go up, and may consequently reduce the EVA. Similarly, higher the size of the firm, higher will be the capital employed. Again, if capital employed is more, the cost on capital employed will also be higher and this may reduce the EVA.

Table 2 further reveals that amongst the corporate governance variables, the variable FII share is statistically significant at the 1% level, Group dummy and Promoter Shares are found to be statistically significant at the 5% level and Average number of directorships, held by all the directors in other companies, is found to be significant at the 10% level. Thus, the four statistically significant variables, namely FII share (1667.461), Average number of

directorships (2977.249), Promoter shares (888.2056) appear to be positive while the coefficient of Group dummy (-28971.21) appears to be negative.

This indicates that FII share, Promoter shares and the average number of directorships held by the directors are likely to have a positive impact on the EVA of the sample firms. If Foreign Institutional Investors' holding is more, it is likely to add more value to the companies and as such, it may be viewed by institutionalized investors as a sign of confidence, adding to the good prospects of the firm. Similarly, Promoter Shares is likely to have a positive impact on EVA. If the promoter share is higher, the involvement of the promoters in the proper functioning of the company is also more, which in turn may help in generating additional value for the company. It is also seen that the Average number of directorships, held by the directors, are likely to have a positive impact on the value addition of a firm. The greater number of directorships a director holds, is likely to bring more diverse knowledge and expertise in the board room and positively influence its decision making process. This may consequently help the company to generate more value.

On the other hand, the companies having Group affiliation are likely to have a negative impact on their economic performance. In such cases, chances of diversion of funds among group companies may increase, or the poor performance of a group company may negatively affect the value of other profitable firms of the group.

Other factors pertaining to corporate governance namely, proportion of independent directors on a board, board busyness, board diligence, DII share, size of a board, percentage of board meetings, audit quality are not found to have any statistically significant impact on the financial performance of the companies, measured in terms of EVA.

MODEL 2: MVA as the Dependent variable

Like Model 1, the Hausman test have been performed, at first. As per the Hausman test, the hypotheses are:

Ho: Random effect model is appropriate.

Ha: Fixed effect model is appropriate.

Table 3 shows the results of Hausman test.

TABLE 3: Hausman Test

MVA	Coefficients	Coefficients		
	(b)	(B)	(b-B)	sqrt(diag(V_b-V_B))
	fixed	random	Difference	S.E.
LEVERAGE	-1812107	-1860449	48342.7	347975.4
LogofTA	592951.7	145693	447258.7	147264.1
AGE	-115784.5	129.0963	-115913.6	27944.19
MajIDBrd	99040.54	8193.142	90847.39	13834.11
BBusyness	-181220.4	-210594.5	29374.07	25981.39
BDiligence~n	2616.851	-310.401	2927.252	.
CEODuality	-95594.9	-60973.99	-34620.91	14766.09

DIIShr	-26114.11	-31103.93	4989.826	7055.629
FIIShr	20064.5	-6403.553	26468.05	7425.347
BSize	-15887.03	8786.604	-24673.64	8121.944
fBM	-1786.637	2426.392	-4213.029	.
AvgNoDirct~p	6398.468	29564.25	-23165.78	16440.33
PrmtrShrs	13549.52	-5565.739	19115.26	8629.1
AudtrBig4	214332.1	93063.69	121268.5	161964.7

b = consistent under Ho and Ha; obtained from xtreg

B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Chi2(14) = 2.95

Prob>chi2 = 0.9992

The result of the Hausman test shows that the null hypothesis is accepted. Thus, the Random Effect Model is appropriate. Hence, the regression results of the random effect model is presented below in Table 4.

TABLE 4: Random Effect Model Regression Results

MVA	Coefficient	p-value
Constant	-363703.6	0.762
Leverage	-1860449*	0.000
Log of TA	145693***	0.051
Age	129.0963	0.969
Maj_indep_board	8193.142	0.893
Brd_busyness	-210594.5	0.236

Brd_diligence	-310.401	0.902
CEO_duality	-60973.99	0.380
DII_share	-31103.93*	0.007
FII_share	-6403.553	0.494
Group	-276638.2	0.181
Brd_size	8786.604	0.567
Per_brd_meeting	2426.392	0.505
Avg_num_directorships	29564.25	0.255
Promoter_shares	-5565.739	0.414
Auditor	93063.69	0.542

*denotes statistical significance level of 1%
**denotes statistical significance level of 5%
***denotes statistical significance level of 10%

Number of obs = 203
Number of groups = 41
Wald chi2 (15) = 40.84
Prob > chi2 = 0.0003

Regression Results of Model 2:

Table 4 reveals that the control variables, namely Leverage and Size of the firm are found to

be statistically significant at 1% and 5% level, respectively. Here, the coefficient of Leverage

(-1860449) appears to be negative thus indicating an inverse relationship with the market

value added to the company. Similar to Model 1, it is found that as the degree of leverage

increases, financial risk is also likely to go up which may consequently reduce the MVA.

Unlike Model 1, here it is seen that the Size of the firm is likely to have a positive impact on

MVA i.e. the larger the size of the firm, the higher will be the market value added to the

firm. It is usually noticed that the market has a positive sentiment towards the larger firms, which may in turn help in value generation.

Table 4 shows that with regard to corporate governance variables, DII share is found to be statistically significant at 1% level. Among the other corporate governance variables, the coefficient of DII holding (-31103.93) appears to be negative indicating a negative impact on the market value added of the firm. This shows that, the higher is the DII share the lesser is the MVA thus indicating that the market is not likely to respond positively towards the value addition of the chosen firms.

Other corporate governance variables are not found to have any statistically significant impact on the financial performance of the companies, measured in terms of MVA.

REGRESSION MODEL 3: ROA as the Dependent variable

In order to find out which regression model is appropriate, Hausman test is performed at first. As per the Hausman test, the hypotheses are:

Ho: Random effect model is appropriate.

Ha: Fixed effect model is appropriate.

Table 5 shows the results of the Hausman test.

TABLE 5: Hausman Test

ROA	Coefficients	Coefficients		
	(b)	(B)	(b-B)	sqrt(diag(V_b-V_B))

	fixed	random	Difference	S.E.
LEVERAGE	-41.87659	-37.0873	-4.789295	8.270308
LogofTA	-5.778276	-1.568871	-4.209406	3.000998
AGE	0.9263736	0.0055372	0.9208364	0.5432628
MajIDBrd	-1.650292	-1.092319	-0.5579728	0.4793198
BBusyness	1.038453	0.1098556	0.9285978	1.411777
BDiligence~n	-0.0413793	-0.0531145	0.0117352	0.0128124
CEODuality	0.8840441	1.354918	-0.470874	0.6128262
DIIShr	0.3943213	0.0321992	0.3621222	0.1813822
FIIShr	0.2249887	0.199525	0.0254637	0.1753657
BSize	-0.3743814	0.2049688	-0.5793501	0.2208587
fBM	-0.0008147	0.0039927	-0.0048075	0.016231
AvgNoDirct~p	1.458426	0.6313633	0.8270625	0.4063557
PrmtrShrs	0.2022465	0.0857818	0.1164647	0.1870436
AudtrBig4	-5.887911	-2.53969	-3.348221	3.661681

b = consistent under Ho and Ha; obtained from xtreg
B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Chi2(14) = 25.71
Prob>chi2 = 0.0282

The result of the Hausman test shows that the null hypothesis is rejected. Thus, the Fixed

Effect Model is appropriate. Hence, the regression results of the fixed effects model is

presented below in Table 6.

TABLE 6: Fixed Effect Model Regression Results

ROA	Coefficient	p-value
Constant	32.46138	0.299
Leverage	-41.87659*	0.000
Log of TA	-5.778276**	0.073
Age	0.9263736**	0.091
Maj_indep_board	-1.650292	0.173
Brd_busyness	1.038453	0.766
Brd_diligence	-0.0413793	0.394
CEO_duality	0.8840441	0.521
DII_share	0.3943213	0.136
FII_share	0.2249887	0.333
Group	0	
Brd_size	-0.3743814	0.268
Per_brd_meeting	-0.0008147	0.991
Avg_num_directorships	1.458426**	0.015
Promoter_shares	0.2022465	0.344
Auditor	-5.887911	0.174

*denotes statistical significance level of 1%

**denotes statistical significance level of 5%
***denotes statistical significance level of 10%

Number of obs = 203
Number of groups = 41
F (14, 148) = 3.65
Prob > F = 0.0000

Regression Results of Model 3:

While estimating the regressions, we have taken into account both the fixed effects regression as well as the random effects regression. However, as per the Hausman test, we find that the fixed effects model is appropriate. Hence Table 6 reports the results of the fixed effects regressions only.

Table 6 reveals that all the control variables, chosen for the study, are found to be statistically significant where the variable Leverage is found to be statistically significant at 1% level and size and age of the firm are found to be statistically significant at the 5% level. Here, the coefficient of Leverage (-41.87659) and Size of the firm (-5.778276) are found to be negative thus having an inverse relationship with the Return on Asset of the company. On the contrary, the coefficient of Age of the firm (0.9263736) appears to have a positive impact on the Return on Assets of the firms. The older the firm, the longer is the establishment of a firm and they are likely to earn higher ROA. The well-established firms have a command over the market and this long establishment of these firms are likely to fetch more return on assets.

With regard to the corporate governance variables, the average number of directorships held by all the directors in other companies is found to be statistically significant at the 5% level, where the coefficient (1.458426) appears to have a positive impact on the ROA of the

company. The multiple directorships held by a board member enable him to gain varied experiences and thus he is able to share more expertise and wisdom in tackling the various business complexities of different firms.

Other factors pertaining to corporate governance are not found to have any statistically significant impact and thus they do not affect the financial performances of the companies, measured in terms of ROA.

REGRESSION MODEL 4: ROE as the Dependent variable

Like the previous models, Hausman Test is performed at first. As per the Hausman test, the hypotheses are:

Ho: Random effect model is appropriate.

Ha: Fixed effect model is appropriate.

Table 7 shows the results of Hausman test.

TABLE 7: Hausman Test

ROE	Coefficients	Coefficients		
	(b)	(B)	(b-B)	sqrt(diag(V_b-V_B))
	fixed	random	Difference	S.E.
LEVERAGE	-34.17109	-56.69857	22.52748	24.25658
LogofTA	-8.082512	-4.554623	-3.52789	8.752051

AGE	0.0785394	0.1194155	-0.0408761	1.582171
MajIDBrd	-6.76951	-7.058113	0.2886031	1.65132
BBusyness	0.4461744	-0.4854496	0.931624	4.775175
BDiligence~n	0.0086207	-0.0394452	0.0480659	0.0534281
CEODuality	4.644442	4.781595	-0.1371532	2.011092
DIIShr	0.3577334	-0.172568	0.5303014	0.5412776
FIIShr	0.5230015	0.355535	0.1674665	0.5184865
BSize	-0.3430647	0.6443983	-0.9874629	0.6626003
fBM	-0.2348548	-0.1586211	-0.0762331	0.0731654
AvgNoDirct~p	2.21944	2.26425	-0.0448098	1.217242
PrmtrShrs	0.3479193	0.1365991	0.2113202	0.5466628
AudtrBig4	-8.564546	-5.663613	-2.900933	10.70798

b = consistent under Ho and Ha; obtained from xtreg
B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Chi2(14) = 8.94
Prob>chi2 = 0.8351

The result of the Hausman test shows that the null hypothesis is accepted. Thus, the

Random Effect Model is appropriate and its results are shown in Table 8.

TABLE 8: Random Effect Model Regression Results

ROE	Coefficient	p-value
Constant	72.8836	0.168
Leverage	-56.69857*	0.001
Log of TA	-4.554623	0.154
Age	0.1194155	0.359
Maj_indep_board	-7.058113**	0.023
Brd_busyness	-0.485450	0.957
Brd_diligence	-0.0394452	0.762
CEO_duality	4.781595	0.167
DII_share	-0.172568	0.751
FII_share	0.355535	0.409
Group	1.188869	0.882
Brd_size	0.6443938	0.372
Per_brd_meeting	-0.1586211	0.401
Avg_num_directorships	2.26425***	0.066
Promoter_shares	0.1365991	0.641
Auditor	-5.663613	0.387

*denotes statistical significance level of 1%

**denotes statistical significance level of 5%
***denotes statistical significance level of 10%

Number of obs = 203
Number of groups = 41
Wald chi2 (15) = 34.46
Prob > chi2 = 0.0029

Regression Results of Model 4:

From the Table 8, we have found that with regard to the control variables, Leverage is found to be significant at the 1% level. Here, the coefficient of Leverage (-56.69857) appears to be negative, thus having an adverse effect on the Return on Equity of the firms. Thus, it may be said that the higher the Leverage, the lower is the ROE.

Table 8 further reveals that from the variables pertaining to corporate governance, the Boards having a majority of independent directors is found to be statistically significant at 5% level. The coefficient of Majority Independent Board (-7.058113) appears to be negative thus indicating a negative impact on the Return on Equity. Theoretically, it is argued that the return on equity is more influenced by the expertise of the executive directors than the independent directors. This is due to the fact, that the executive directors are directly engaged in the day-to-day planning of the company and thus instil proper functioning of the company. Since the independent directors are not always aware of the full functioning of the company so they are unable to directly contribute to the return generation of the company, and more so because the larger boards may slow down decision making. The Average number of directorships held by the directors in other companies is found to be statistically significant at 10% level. The coefficient for Average number of directorship (2.26425) appears to be positive. This indicates that the firms, which appoint directors holding several number of directorships, are likely to generate more return on equity to the

equity shareholders. But, the firms with majority independent boards are affected adversely with respect to their return on equity shareholders' fund.

Other factors, pertaining to corporate governance, are not found to have any statistically significant results and thus they do not affect the financial performances of the companies, measured in terms of ROE.

CONCLUSION

The present study attempts to analyse the impact of corporate governance in the determination of firm value. In this regard various corporate governance variables and control variables have been chosen. The financial measures used in the study to measure firm performance are Economic Value Added (EVA), Market Value Added (MVA), Return on Assets (ROA) and Return on Equity (ROE). After the statistical analysis it is found that Leverage is likely to have a negative impact on both the economic and market value added to the company as well as on the return on equity and assets. The size of the firm is also likely to show a negative impact on the EVA, ROA and ROE. Thus, it implies that if the capital employed is more, the cost on capital employed will also be higher and this may reduce the EVA, ROA and ROE. On the other hand, the age of the firm appears to have a positive impact on the ROA of the firms. This implies that the older the firm, the longer is the establishment of a firm and they are likely to earn higher ROA.

Amongst the corporate governance variables, it is found that the average number of directorships held by all the directors are likely to have a positive impact on the EVA of the firm, as well as, on the return on assets and return on equity. Thus, it shows that the multiple directorships held by a board member helps him to gain varied experiences and

thus he is able to share more expertise and wisdom in tackling the various business complexities of different firms. The Foreign Institutional Investors' share and Promoter holding is likely to positively influence the economic value addition of the company. If Foreign Institutional Investors' holding is more, it is likely to add more value to the companies and as such, it may be viewed by institutionalized investors as a sign of confidence, adding to the good prospects of the firm. Similarly, Promoter Shares is likely to have a positive impact on EVA. If the promoter share is higher, the involvement of the promoters in the proper functioning of the company is also more, which in turn may help in generating additional value for the company. On the other hand, the companies having Group affiliation are likely to have a negative impact on their economic performance. In such cases, chances of diversion of funds among group companies may increase, or the poor performance of a group company may negatively affect the value of other profitable firms of the group. Majority Independent Board appears to be negative thus indicating a negative impact on the Return on Equity. Theoretically, it is argued that the ROE is more influenced by the expertise of the executive directors than the independent directors. This is due to the fact, that the executive directors are directly engaged in the day-to-day planning of the company and thus instil proper functioning of the company. These findings reveal the existence of correlation between the firm value and corporate governance characteristics of the firm.

REFERENCES:

Abidin, ZZ & Kamal, NM 2009, 'Board Structure and Corporate Performance in Malaysia', *International Journal of Economics and Finance*, vol.1, no. 1, pp150-164.

Adams, Renee, and Daniel Ferreira. 2009. Women in the boardroom and their impact on governance and performance. Journal of Financial Economics 94 (2): 291–309.

Agrawal, A. and Knoeber, C. (1996). "Firm performance and mechanisms to control agency problems between managers and shareholders", *Journal of Financial and Quantitative Analysis*, 31(3), pp. 377-397.

Anderson, Ronald C. and David M. Reeb. 2003. "Founding Family Ownership and Firm Performance." Journal of Finance. 58:3, pp. 1301-1328.

Balasubramanian, N. (1997). Towards excellence in board performance. *Management Review*, January–March, 67–84.

Baysinger, B. D., and Butler, H. H. (1985). "Corporate governance and the board of directors: Performance effects of changes in board composition." *J. Law Econom.*, 1, 101–124.

Berg, S. and Smith, S. (1978) CEO and Board Chairman: A Quantitative Study of Dual vs Unitary Board Leadership, *Directors and Boards*, Spring, 34–39.

Bhagat, S. and B. Black, (2002) "The Non-Correlation between Board Independence and Long- Term Firm Performance," Journal of Corporation Law 27, pp. 231–273.

Bhagat, S., B. Black and M. Blair, ''Relational Investing and Firm Performance,'' Journal of Financial Research 27 (2004), pp. 1–30.

Black B. S., Tang H. and Kim W., (2003), Does corporate governance affect firm value? Evidence form Korea. Working Paper No. 237, Stanford Law School.

Brown, L. and M. Caylor, ''Corporate Governance and Firm Operating Performance,'' Journal of Accounting and Public Policy 25 (2006), pp. 409–434.

Byrd, J. J., and Hickman, K. A. (1992). "Do outside directors monitor managers?" *J. Financ. Econ.*, 32, 195–221.

Cadbury A. 2006. The rise of corporate governance. In *The Accountable Corporation, Volume 1. Corporate Governance*, Epstein M, Hanson KO (eds) Praeger: Westport, CT; 15–43.

Caramanolis-Cötelli, B., "External and Internal Corporate Control Mechanisms and the Role of the Board of Directors: A Review of the Literature", Working Paper. nr. 9606, Institute of Banking and Financial Management, 1995.

Chang S.J., (2003). Ownership structure, expropriation and performance of group affiliated companies in Korea. Academy of Management Journal, 46,2, 238-253.

Chang, E. C. and J. M. Pinegar. "Risk and Inflation." Journal of Financial and Quantitative Analysis, 22, No. 1 (1987), 89-98.

Chen, C., W., Lin, J., B. and Yi, B. (2008), "CEO Duality and Firm Performance: An Endogenous Issue". Corporate Ownership and Control, 6(1), 58-65.

Chen, N., Roll, R. and S. Ross, 1986, "Economic Forces and the Stock Market," Journal of Business 59, 383-403.

Choi, J.J., Sami, H. and Zhou, H. 2010. The impacts of state ownership on information asymmetry: evidence from emerging market. *China Journal of Accounting Research* 3(1): 13-49.

Chung, K.H., (1989), "The Impact of the Demand Volatility and Leverages on the Systematic Risk of Common Stocks," Journal of Finance and Accounting 16(3), 343-360.

Coles, J., Daniel, N., Naveen, L., 2008. Boards: does one size fit all? Journal of Financial Economics 87, 329–356.

Connelly, J. T., & Limpaphayom, P. (2004). Environmental reporting and firm performance: evidence from Thailand. The Journal of Corporate Citizenship, 13, 137-149.

Dahya, J., Garcia, L. G., & Bommel, J. v. (2009). One man two hats: What's all the commotion! The Financial Review, 44(2), 179-212.

Daily, C. M., and Dalton D. R. _1992_. "The relationship between governance structure and corporate performance in entrepreneurial firms." *J. Business Venturing*, 7, 375–386.

Daily, C. M., and Dalton, D. R. (1993). "Board of directors leadership and structure: Control and performance implications." *Entrepreneurship Theory Pract.*, 17, 65–81.

Daily, C., Dalton, D., & Cannella, A. (2003). Corporate governance: Decades of dialogue and data. Academy of Management Review, 28(3), 371-382.

Dalton, D., Daily, C., Ellstrand, A., and Johnson, J. _1998_. "Meta analytic reviews of board composition, leadership structure, and financial performance." *Strategic Manage. J.*, 19, 260–290.

Dalton, D., Daily, C., Johnson, J. and Ellstrand, A. (1999) Number of directors and financial performance: A meta-analysis, Academy of Management Journal, 42, 674- 686.

Demirgüç-Kunt, A. & Maksimovic, V. (1998) Law, finance, and firm growth, *Journal of Finance,* 53(6), pp. 2107–2137.

Demsetz, H. (1983). The structure of ownership and the theory of the firm. Journal of Law and Economics, 26, 375-90.

Demsetz, H. and Lehn, K., 1985, 'The structure of corporate ownership- causes and consequences', Journal of Political Economy, Vol. 93 (6), pp. 1155–77.

Derwent, R. A., and Jones, M. E. _1996_. *The corporate governance handbook*, Gee Publishing, a Thomson Company, London.

Donaldson, L., and Davis, J. H. (1991). "Stewardship theory or agency theory: CEO governance and shareholder returns." *Austr. J. Manage.*, 16, 49–64.

Dutta, P. and Bose, S. (2006), "Gender Diversity in the Boardroom and Financial Performance of Commercial Banks: Evidence from Bangladesh". The Cost and Management, 34(6), 70- 74.

Dwivedi, N., & Jain, A.K. (2005). Corporate governance and performance of Indian firms: The effect of board size and ownership. Employee Responsibilities and Rights Journal, 17(3), 161-172.

Ehikioya, B. I. (2009). Corporate governance structure and firm performance in developing economies: evidence from Nigeria. Corporate Governance, 9 (3), 231-243.

Eisenberg, T., Sundgren, S., & Wells, M. T. (1998). Larger board size and decreasing firm value in small firms. *Journal of Financial Economics*, *48,* 35–54.

Epstein MJ, Hanson KO. 2006 (eds.). The Accountable Corporation. Volume 1. Corporate Governance. Praeger: Westport and London.

Faccio, M. and M. Lasfer, ''Managerial Ownership, Board Structure and Firm Value: The UK Evidence,'' Working Paper (Vanderbilt University, 1999).

Fama, E. and M. Jensen, ''Separation of Ownership and Control,'' The Journal of Law and Economics 26 (1983), pp. 301–325.

Fama, E., ''Agency Problems and the Theory of the Firm,'' Journal of Political Economy 88 (1980), pp. 288–307.

Fama, Eugene, and Michael Jensen, 1985, Organizational forms and investment decisions, Journal of Financial Economics 14, 101-119.

Fathi Elloumi, Jean-Pierre Gueyié, (2001) "Financial distress and corporate governance: an empirical analysis", Corporate Governance: The international journal of business in society, Vol. 1 Iss: 1, pp.15 – 23.

Goilden, B. R., & Zajac, E. J. (2001). When will boards influence strategy? Inclination × Power = Strategic change. *Strategic Management Journal*, *22,* 1087–1117.

Goodstein, J., Guatam, K. and Boeker, W. (1994). "The effects of board size and diversity on strategic change", S*trategic Management Journal,*15(3), pp. 241-250.

Goswami, O. (2000). *The Tide Rises, Gradually-Corporate Governance in India*, Presented at the Informal Workshop held on 3–4 April 2000 at OECD Headquarters, Paris on behalf of Confederation of Indian Industry, New Delhi.

Gregory, H., and Simmelkjaer, R. T. _2002_. *Comparative study of corporate governance codes relevant to the European Union and its members states on behalf of the European commission*, Weil, Gotshal, & Manges, LLP, New York.

Harry Markowitz, (1991), Foundations of Portfolio Theory, *Journal of Finance*, **46**, (2), 469-77.

Heidrick & Struggles (2009), "Corporate Governance Report 2009 - Boards in turbulent times". Heidrick and Struggles International, Inc.

Hewa-Wellalage, N. and Locke, S. (2011), "Does CEO Duality is Really Matter? Evidence from an Emerging Market". Corporate Ownership and Control, 8(4), 112-122.

Hill, C. and S. Snell, ''External Control, Corporate Strategy and Firm Performance in Research Intensive Industries,'' Strategic Management Journal 9 (1988), pp. 577–590.

Himmelberg, C. P., Hubbard, G. R., & Palia, D. (1999). Understanding the determinants of managerial ownership and the link between ownership and performance. *Journal of Financial Economics*, *20,* 317–346.

James, Harvey, 1999, Owner as manager, extended horizons and the family firm, International Journal of the Economics of Business 6, 41-56.

Jensen, M. C. (1993) The modern industrial revolution, exit, and the failure of internal control systems, Journal of Finance, 48, 831-880.

Jensen, M. C., & Meckling, W. (1976). Theory of the firm: Managerial behaviour, agency costs, and ownership structure. *Journal of Financial Economics*, *3,* 305–360.

John, K. and Senbet, L.W. (1998). "Corporate governance and board effectiveness.", *Journal of Banking and Finance,* 22(4), pp. 371-403.

Johnson, S., P. Boone, A. Breach, and E. Friedman. 2000. ''Corporate Governance in the Asian Financial Crisis.'' Journal of Financial Economics 58: 141–186.

Kang, D. (1998). The impact of ownership type on performance in public corporations: A study of the US textile industry 1983-82. Harvard Business School Working Paper.

Khanna, T. & Palepu, K. (2000) "Emerging Market Business Groups, Foreign Intermediaries, and Corporate Governance" *Concentrated Corporate Ownership.* University of Chicago Press. pp. 265 – 294.

Khatri, N., Fern, C. T., & Budhwar, P. (2001). Explaining employee turnover in an Asian context. Human Resource Management Journal, 11 (1), pp. 54-74.

Kiel, G., & Nicholson, G. (2003). Board composition and corporate performance: How the Australian experience informs contrasting theories of corporate governance. Corporate Governance: An International Review, 11(3), 189-205.

Klein, A., ''Firm Performance and Board Committee Structure,'' Journal of Law and Economics 41 (1998), pp. 275–303.

Krugman, Paul. "The Myth of Asia's Miracle". *Foreign Affairs* 73, no. 6 (1994): 62–78.

Kwak, M., (2003). The advantages of family ownership. MIT Sloan Management Review, 12.

La Porta, R., Florencio, L. S., Shleifer, A., & Vishny, R. W. (1999). Corporate ownership around the world. *Journal of Finance*, *54*(2), 471–517.

Lauterbach, B & Vaninsky, A 1999, „Ownership structure and firm performance: Evidence from Israel", Journal of Management and Governance, vol. 3, no. 2, pp. 189-201.

Leland, H. E. & Toft, K. B. (1996). Optimal capital structure, endogenous bankruptcy, and term structure of credit spreads. Journal of Finance 51 (3), 987-1019.

Levine, R. & Zervos, S. (1998) Stock markets, banks, and economic growth, *American Economic Review,* 88(3), pp. 537–558.

Lintner, J. (1965). The Valuation of Risk Assets and the Selection of Risky Investments in Stock Portfolios and Capital Budgets. Review of Economics and Statistics, 73, 13-37.

Lipton, M. and Lorsch, J. W. (1992) A modest proposal for improved corporate governance, Business Lawyer, 48, 59- 77.

Liu, C., Uchida, K., and Yang, Y. 2012. Corporate governance and Firm Value during the global financial Crisis: Evidence from China. International Review of Financial Analysis 21:70-80.

Luo Y. 2005a. Corporate governance and accountability in multinational enterprises: concepts and agenda. *Journal of International Management* **11**: 1–18.

M. Bertrand, P. Mehta, and S. Mullainathan. 2002. "Ferreting out Tunneling: An Application to Indian Business Groups," Quarterly Journal of Economics 117, pp. 121–48.

M.E. Sharpe, *Eastern European economics*. (1962). Armonk, N.Y.

MacKinlay, A. C., 1987, "On Multivariate Tests of the CAPM," Journal of Financial Economics 18, 341-372.

MacKinlay, A. Craig and Matthew P. Richardson, 1991, Using generalized method of moments to test mean-variance efficiency, *Journal of Finance* 46, 511-527.

Mallik, A. K and Rakshit, D. (2005): "EVA Based Segmental Reporting: A Case Study", *Research Bulletin*, Vol. No- XXVI, Pp-12-27.

Markowitz, H. (1952) Portfolio Selection. *Journal of Finance*, **7**, 77-91.

McConaughy D., M. Walker, G. Henderson & C. Mishra, (1998). Founding family controlled firms: Efficiency and value. Review of Financial Economics 7,1, 1-19.

McConnell, J. and H. Servaes, ''Additional Evidence on Equity Ownership and Corporate Value,'' Journal of Financial Economics 27 (1990), pp. 595–612.

Miller, M. (1991). Leverage, Journal of Finance, 46, p. 479-488.

Mishra C. & McConaughy, (1999). Founding family control and capital structure: The risk of loss of control and the aversion of debt. Entrepreneurship Theory and Practice 23(4), 53-64.

Mishra C., Randoy T. & J. Jensen, (2001. The effect of founding family influence on firm Value and corporate governance, Journal of International Financial Management and Accounting, 12:3, 235-259.

Moore, M. T. (2002). "Corporate governance: An experienced model." *Director's Monthly*, 26 (3), 1–9.

Morck, R., A. Shleifer and R. Vishny, ''Management Ownership and Market Valuation: An Empirical Analysis,'' Journal of Financial Economics 20 (1988), pp. 293–316.

Mueller, D.C. (2006) Corporate Governance and Economic Performance, *International Review of Applied Economics, Vol. 20, No. 5, 623–643, December 2006*

O'Reilly, C., Caldwell, D., and Barnett, W. (1989). "Work group demography, social integration, and turnover." *Adm. Sci. Q.*, 34, 21–37.

Pearce, J.A. and Zahra, S.A. (1992). "Board composition from strategic contingency perspective", *Journal of Management Studies*, 29(4), pp. 411-438

Peng M. Outside Directors and Firm Performance During Institutional Transitions. Strategic Management Journal 2004; 25: 453-471.

Pfeffer, J. (1972). "Size and composition of corporate boards of directors." *Adm. Sci. Q.*, 17, 218–228.

Radelet, Steven and Jeffrey Sachs. "The East Asian Financial Crisis: Diagnosis, Remedies, Prospects". Research paper, Brookings Panel, Washington D.C., 26–27 March 1998.

Rajan, R. G. & Zingales, L. (1998) Financial dependence and growth, *American Economic Review,* 88, pp. 559–586.

Ramaswamy, K., Li, M., & Veliyath, R. (2002). Variations in ownership behaviour and propensity to diversify: A study of the Indian corporate context. *Strategic Management Journal*, *23,* 345–358.

Randoy, T., & Goel, S. (2000). Ownership structure, founding family leadership and performance in Norwegian SMEs. Working paper, University of Minnesota-Duluth.

Rasiah, Rajah. "Assessing the Recovery Plans of Asian Economies Destabilized by Financial Crisis". Conference paper, Faculty of Economics and Business, UNIMAS, 1999.

Rebeiz, K. S. (2004). "Corporate governance accountability for multinational firms: Beyond the call for regulatory reforms." *J. Int. Business Economy*, 2(1), 175–181.

Rebeiz, K.S. & Salameh, Z. (2006) Relationship between Governance Structure and Financial Performance in Construction, *Journal of Management in Engineering*, Vol. 22, No. 1, January 1, 2006.

Rechner, P. L., and Dalton, D. R. _1989_. "The impact of CEO as board chairperson on corporate performance: Evidence vs. rhetoric." *Acad. Manage. Executive*, 3, 141–143.

Rechner, P. L., and Dalton, D. R. _1991_. "CEO duality and organizational performance: A longitudinal analysis." *Strategic Manage. J.*, 12_2_, 155–160.

Ross, S. A., 'The Arbitrage Theory of Capital Asset Pricing', Journal of Economic Theory, Vol. 13, No. 3, 1976.

Sarkar J., & Sarkar S., (2000), Large shareholder activism in corporate governance in developing countries: Evidence from India: International Review of Finance, 1:3 161-194.

Sarkar, J. and S. Sarkar. "Large Shareholder Activism in Corporate Governance in Developing Countries: Evidence from India." International Review of Finance, 1 (2000), 161-194.

Sauer, A., and Murphy, A., (1992). An Empirical Comparison of Alternative Models of Capital Asset Pricing in Germany. Journal of Banking and Finance, Vol. 16, pp. 183- 196.

Schellenger, M. H., Wood, D., and Tashakori, A. (1989). "Board of directors composition, shareholder wealth, and dividend policy." *J. Management*, 15, 457–467.

Sharpe, W.F. (1964). Capital Asset Prices: A Theory of Market Equilibrium under Conditions of Risk. Journal of Finance, 19 (3), 425-42.

Sharpe, William F., 1991, "Capital Prices with and without Negative Holdings," The Journal of Finance, June 1991, pp. 489-509.

Shleifer, A. & Vishny, R. W. (1997) A survey of corporate governance, *Journal of Finance,* 52(2), pp. 737–783.

Singh, M. and W.N. Davidson III, (2003). Agency costs, ownership structure and corporate governance mechanisms, Journal of Banking and Finance. 27: 793-816.

Slovin, M. B., & Sushka, M. E. (1993). Ownership concentration, corporate activity and firm value: Evidence from the death of inside blockholders. Journal of Finance, XLVIII (4), 1293-1321.

Smith, N., Smith, V., & Verner, M. (2006). Do women in top management affect firm performance? A panel study of 2500 Danish firms. International Journal of Productivity and Performance Management, 55(7), 569-593.

Stewart, G. B. (1991), The Quest for Value: A Guide for Senior Managers, First Ed., New York: Harper Business.

Stulz, R. M. (1988). Managerial control of voting rights: Financing policies and the market for corporate control, *Journal of Financial Economics*, *20,* 25–54.

Thomsen, S., & Pedersen, T. (2000). Ownership structure and economic performance in the largest European companies. *Strategic Management Journal*, *21,* 689–705.

Umstead, David A. and Bergstrom, Gary L. , "Djmamic Estimation of Portfolio Betas," Journal of Financial and Quantitative Analysis , Vol. 14, No. 3 (September, 1979), 595-614.

Vafeas, N. (1999) Board Meeting Frequency and Firm Performance, *Journal of Financial Economics*, 53, 113–142.

Vance, S. (1978). "Corporate governance: Assessing corporate performance by boardroom attributes." *J. Business Res.*, 6, 203–220.

Van-Ees, H., & Postma, T. (2002). On the equilibrium relationship between board size and corporate performance. *Proceedings of the EURAM 2nd Annual Conference*, Stockholm.

Vries de. (1993). The dynamics of family controlled firms: The good and bad news. Organizational Dynamics, 59-71.

Ward, J. L. (1991). *Creating effective boards for private enterprises*, Jossey-Bass Publishers, San Francisco.

Weiss, A. and G. Nikitin, ''Foreign Portfolio Investment Improves Performance: evidence from the Czech Republic,'' Topics in Economic Analysis and Policy 4 (2004), pp. 1205– 1255.

Yermack, D. (1996) Higher Market Valuation for Firms with a Small Board of Directors, *Journal of Financial Economics*, 40, 185–213.

Zingales, L. (1998). Corporate governance, in Peter Newman (ed.). The New Palgrave Dictionary of Economics and the Law, London: Macmillan, 497-502.