EFFECT OF BOARD COMPOSITION ON FIRM'S PERFORMANCE: A CASE OF PAKISTANI LISTED COMPANIES

Aamir Khan (Corresponding author)

Dr. Sajid Hussain Awan

Shaheed Zulfiqar Ali Bhutto Institute of Science and Technology, Islamabad

Plot 67, Street 9, H8/4, Islamabad, Pakistan

ABSTRACT

This research attempted to assess the effect of board composition on firm’s performance, specifically a case of Pakistani listed companies. A sample of 91 listed companies at Karachi Stock Exchange KSE-100 index was randomly selected. Group statistics and independent sample t-test were used as most appropriate measures of the categorical variable board composition. Results supported all three hypotheses by showing that the listed companies of Pakistan at Karachi Stock Exchange, which have independent board members in their board, were showing greater return on assets (ROA), return on equity (ROE) and Tobin’s q. As these were the measures or components of firm’s performance, so it means that the listed companies of Pakistan at Karachi Stock Exchange with independent board were showing greater firm’s performance. Based on results and analysis it is concluded that companies having independent directors in their board composition will show greater firm performance.

KEYWORDS: CORPORATE GOVERNANCE, BOARD COMPOSITION, FIRM'S PERFORMANCE, INDEPENDENT BOARD, INDEPENDENT DIRECTORS, PAKISTAN

1. Introduction

Corporate governance is one of the most important areas, widely studied and improved by researchers for increased firm performance. It is commonly known that if corporate governance improves then firm performance will also improve. There are different dimensions of corporate governance such as board size, audit committee, CEO compensation structure, CEO duality, ownership structure and frequency of meetings etc., which are mostly researched earlier. This study aims to find relationship between board composition and its effects on firm’s performance. This area is studied by different researchers (Bhagat & Black, 1999; Shah, Butt, & Saeed, 2011; Yasser, Entebang, & Mansor, 2011) but there results contradict with each other. Some of the researchers (Hermalin, 2005; Rashid, Zoya, Lodh, & Rudkin, 2010; Shah et al., 2011; Yasser et al., 2011) revealed that independent board may improve the firm performance while other (Bhagat & Black, 1999) found no such relationship. Therefore the current study attempts to address the confusion prevalent in earlier studies and re-examine the relationship between board composition and firm performance. Moreover this study specifically addresses the case of Pakistani listed companies. This section discusses the background of the study stating an overview of previous work done and importance of corporate governance and board composition for success of a firm. Further it discusses the significance of the study. The discussion then moves on to the contextual analysis, broad and specific problem area, aim and objectives of the study and research questions. This section finally explores the delimitations of the study.

1.1 Significance of the study

The existing literature showed that board composition has a positive effect on firm’s performance, but there is conflicting point between them, some of the researchers (Hermalin, 2005; Rashid et al., 2010; Shah et al., 2011; Yasser et al., 2011) revealed that independent board has a positive impact on firm’s performance while other (Bhagat & Black, 1999) founds no such relationship. The significance of current research is that it was aimed to clarify this conflicting point among these studies. Furthermore it
investigated the relationship between board composition and firm performance in Pakistani listed companies. This study was aimed to find that either independent board will reflect higher firm performance, or not. Furthermore, by using finding of current research, it was expected that corporations will be able to know that this area is of greater significance and by improving their board composition they will be able to improve performance of their firms.

1.2 Aim and objectives of the study

The aim of current research was to clarify the conflicting point among these studies (Hermalin, 2005; Bhagat & Black, 1999, Rashid et al., 2010; Shah et al., 2011; Yasser et al., 2011) and to investigate that either there is any relationship between board composition and firm performance, and If there is any relationship, then either independent board will reflect higher firm performance or not. As most of existing literature (Javed & Iqbal, 2007; Adams et al., 2010; Ibrahim et al., 2010) showed that corporate governance, in particular Board composition have a positive effect on firm performance and it will enhance firm performance and It has also been stated (Shah et al., 2011; Yasser et al., 2011) that if the composition of board is Independent, it will ultimately reflect higher firm performance. So the objectives of current research were:

1. To examine that how firm performance is related to board composition.
2. To investigate either independent board will reflect higher firm performance in Pakistani listed companies or not.
3. To investigate that how the performance of all sectors of listed companies of Pakistan is affected by board composition.

2. Literature Review

The Literature review provides evidences regarding board composition and its effects on firm’s performance. This section discusses some important concepts and definitions regarding current area of study such as corporate governance, board composition, independent and dependent boards and firm performance. Furthermore it discusses theoretical reflections and substantiates evidences from the literature pertaining to the topic under study; showing the linkages between corporate governance, board composition and firm performance. In addition, since the primary PURPOSE of this study is to see how that board composition had a effect on firm’s performance and what are the effects of Independent board on firm performance in Pakistani listed companies?, therefore, the study continues to described critical analysis of literature and identifies literature gap pertaining to the topic under study.

2.1 Concepts and definitions

Definitions clarify the major concepts which are under study and provide insight about the major terms used in the study. Few important concepts regarding current study are defined as following;

2.1.1 Corporate governance

Corporate governance can be defined as the way in which stakeholders (owners/ shareholders, creditors, employees, customers, managers, suppliers, the government and local residents) of the firm have a influence over the management of a firm (Shah et al., 2011). Corporate governance refers to the way an organization is administrated, directed or controlled. It provides the set of rules and regulations for the current and potential stakeholders that affect the manager’s decision and it specifies the distribution of responsibilities and rights among stakeholders. By doing this, it also structure the company objectives and provides the means through which they achieve these objectives and monitoring performance. Corporate governance may be the way through which it is insured that the firms are run for the benefit of investors, and interests of managers and investors are brought into a line.

Corporate governance refers to the processes and bodies that are responsible for the decision that, in long term, have most influence, on the composition of management team, on capital structure, and on taking of important risks for the owners of the company. Mechanisms that protect the interests of the shareholders are known as corporate governance mechanisms and firms will face more agency problems (conflict of interest arising between creditors, shareholders and management because of differing goals) & managers of those firm’s get more private benefits, if they have weak governance structures (Core, Holthausen, & Larcker, 1999).
2.1.2 Board composition

Boards mostly compose of executive and non-executive directors. Executive directors refer to dependent directors and non-Executive directors to independent directors (Shah et al., 2011). At least one third of independent directors are preferred in board, for effective working of board and for unbiased monitoring. Dependent directors are also important because they have insider knowledge of the organization which is not available to outside directors, but they can misuse this knowledge by transferring wealth of other stockholders to themselves (Beasly, 1996).

2.1.2.1 Independent board

A board composed of members who are not executives of a company, nor shareholders, nor blood relatives or in law of the family (Gallo, 2005). An independent board is generally composed of members who have no ties to the firm in any way, therefore there is no or minimum chance of having a conflict of interest because independent directors have no material interests in a company. Dalton, Daily, Ellstrand, & Johnson (1998) saw Jacobs (1985) stating that independent directors are important because inside or dependent directors may have no access to external information and resources that are enjoyed by the firm's outside or independent directors (e.g., CEOs of other firms, former governmental officials, investment bankers, Social worker or public figures, major suppliers). Moreover, for advice/counsel inside or dependent directors are available to the CEO as a function of their employment with the firm; their appointment to the board is not necessary for fulfillment of this function.

2.1.2.2 Dependent board

Dependent board members are associated with or employed by the company, for which they receive remuneration or salary. These directors are mostly working in upper levels of management of a company or have a vested interest in the company. Dependent directors have a full time job with the firm. As compared to outside or independent directors, dependent directors have insider knowledge of the organization which can be a benefit because they know better about an organization, but they can misuse this knowledge by transferring wealth of other stockholders to themselves (Beasly, 1996).

2.1.3 Firm’s performance

Firm performance is studied and measured by different researchers (Bhagat & Black, 1999, Shah et al., 2011; Matolcsy & Wright, 2011; Yasser et al., 2011) using different measures. Matolcsy & Wright (2011) measured firm performance measured by ROA (Return on Assets= EBIT / Average total Assets - in book value -), ROE (Return on Equity=net profit / equity - in book value -), ΔMVE (Change in market value of equity), ΔMVE-risk (Change in market value of equity, adjusted for dividends and risk). Yasser et al. (2011) used return on equity (ROE) and profit margin (PM) for the measurement of firm performance.

Market based measures of companies’ performance were done by Shah et al. (2011) by Marris ratio (Market value of equity/ book value of equity) and Tobin’s Q (market value of equity + book value of debt/total of assets - in book value -), whereas financial reporting perspective was measured by ROE and Return on investment (net result + interest) / (equity +total debt). Bhagat & Black (1999) measured dependent variable firm performance by Tobin's Q, Return on assets (Operating income/Assets), Turnover ratio (Sales/Assets), Operating margin (Operating income/Sales), Sales per employee and also by Growth of Assets, Sales, Operating income, Employees and Cash flows.

2.2 Theoretical reflections and evidences from the literature

Corporate governance and firm performance is studied by various researchers (Bhagat & Black, 1999; Javed & Iqbal, 2007; Ibrahim et al., 2010; Matolcsy & Wright, 2011; Shah et al., 2011; Yasser et al., 2011) and found evidences regarding the relationship that exists among them. These studies reflected the following linkages with respect to corporate governance and firm performance.

2.2.1 Linkage between Corporate governance and firm performance

Matolcsy & Wright (2011) provided evidences about an important aspect of corporate governance that CEO’s having the ‘wrong’ compensation structure will cause lower CEO and firm’s performance. The results of the study suggested that firms whose CEO’s receive compensation inconsistent with their firm characteristics have a lower performance as compared to those firms whose CEO’s compensation is
consistent with their firm’s characteristics. If the CEO receives good compensation and that compensation is consistent with firm’s goals than it will lead to greater firm performance, so conclusively this study made contribution by reflecting an important aspect of corporate governance and its linkage to firm performance.

The relationship that exists between firm performance and corporate governance was reflected by Yasser et al. (2011); using two proxies (ROE and Profit Margin) and four corporate governance mechanisms (board size, audit committee, board composition and Chairman (CEO) Duality) and found different linkages between them. Bhagat & Black (1999) and Shah et al. (2011) also found linkage between corporate governance and firm performance while studying board composition and ownership structure.

Javed & Iqbal (2007) analyzed the relationship between firm value and total corporate governance index (CGI) and three sub-indices (Shareholdings, Board and Ownership, and Transparency and Disclosures). Their result reflects that corporate governance and firm valve are linked and also it does matter in Pakistan.

In chemical and pharmaceutical of Pakistan Ibrahim et al. (2010) also studied relationship between firm performance and total corporate governance and found significant impact of corporate governance on ROE, while insignificant impact on ROA. Whatever is the impact, this study also shows linkage between corporate governance and firm performance. So conclusively the above stated theories reflected the linkage between corporate governance and firm performance.

2.2.2 Linkage between Board composition and firm performance

There is a positive and significant relationship between ROE, board composition and audit committee; which evidences the significant linkage between board composition and firm performance, as ROE is a measure of firm performance (Yasser et al., 2011).

The result of the study (Bhagat & Black, 1999) also found linkage between board composition and firm performance, but it shows negative relationship between board composition and firm performance. The study reviled that presently in large public companies with the variety of board compositions, there is no significant evidence that greater board independence will lead to greater firm profitability. Furthermore, there is no empirical support for relationship that firms should have a majority of independent boards (with only one or two inside directors) for greater firm performance. In contrast, this study found some evidence and offered some possible explanations that firms having a majority of independent boards are less profitable than other firms. It suggests that firms should have a mix of dependent and independent directors because they would bring different skills and knowledge to the board and will ultimately lead to batter firm performance.

Shah et al. (2011) examined the relationship that exists between ownership structure and performance of the listed companies in an emerging South Asian market and found that a more independent and effective board of directors accelerates or boosts a firm’s performance. Their results reflects the linkage between board composition and firm performance and evidences that independent board members are important because companies if adopt independent board, can improve firm performance.

Rashid et al. (2010) examined the relationship between independent board composition and firm performance and found that independent board directors added value to the firm performance of Bangladeshi firms.

2.3 Critical analysis of the literature

It is clear that there is a link among corporate governance and firm performance (Javed & Iqbal, 2007; Yasser et al., 2011). Various researchers (Bhagat & Black, 1999; Hermalin, 2005; Javed & Iqbal, 2007; Adams et al., 2010; Ibrahim et al., 2010; Rashid et al., 2010; Matolcsy & Wright, 2011; Shah et al., 2011; Yasser et al., 2011) studied corporate governance, its effects on firm’s performance and in particular the role of boards of directors and its composition in different dimensions.

Studies revealed that if firm has more independent board than it will have greater propensity to monitor, which in turn will hire external CEO to get more efficient CEO performance or efforts. If the CEO didn’t perform with greater efforts than he/she is more likely to be fired or will have a shorter average tenure, so if the CEO is giving more efforts and have less job security consequently CEO will require greater compensation (Hermalin, 2005; Adams et al., 2010). And if CEO’s compensation is consistent with
their firm’s characteristics than it will result in greater performance of the firm (Matolcsy & Wright, 2011). So by combining these studies we came to know that independent board will indirectly lead to greater firm performance.

There are also some studies (Javed & Iqbal, 2007; Adams et al., 2010; Ibrahim et al., 2010) which revealed that corporate governance, in particular board composition have a direct effect on firm performance and it will enhance firm performance. But there are some contrasting views whose sector wise analysis stated that there is an insignificant impact (Ibrahim et al., 2010) i.e. on pharmaceutical sector’s profitability and performance.

Conclusively the existing literature (Hermalin, 2005; Rashid et al., 2010; Shah et al., 2011) shows that if the composition of board is Independent, it will ultimately reflect higher firm performance. But the conflicting point is that some studies (Bhagat & Black, 1999; Ibrahim et al., 2010) also stated there is some evidence that firms with supermajority independent boards are less profitable than other firms and it suggested that it may be useful for firms to have a moderate number of inside or dependent directors.

3. Theoretical Model Along With Hypotheses

Based on the previous section, this section discusses the theoretical model of “effects of Board composition on firm performance” as shown in figure 1. The model shows the link between dependent variable firm performance and independent variable board composition and its two components Dependent and Independent board. Moreover it also shows the components of firm performance such as ROA, Tobin’s Q and ROE and their role in measuring such relation between independent and dependent variables. Furthermore this Section discusses different hypotheses that are to be tested in current research.

[Insert Figure 1 here]

3.1 Hypotheses

H1: Companies heaving Independent board composition show higher ROA, which as a result show greater firm’s performance.

H2: Companies heaving Independent board composition show higher ROE, which as a result show greater firm’s performance.

H3: Companies heaving Independent board composition show higher Tobin’s Q, which as a result show greater firm’s performance.

4. Methodology

This Methodology section provides information of Population and sample selected for the study. This section shows that which sample is used in current research. Furthermore it discusses the type of current study, the strength of the research and data collection & analysis techniques used in current study.

4.1 Sample Selection

The sample selected for current research was listed companies of Karachi stock exchange KSE-100 index. Due to availability or access to data and the time factor data of 91 listed companies of Karachi stock exchange was gathered. Moreover the data gathered was on the base of random sampling technique, These 91 complies were randomly selected regardless of sector.

4.2 Type of Study

The type of current study was cross-sectional. Listed companies at Karachi Stock exchange KSE-100 indexed were randomly selected and the data of these companies for the year 2010 was gathered.

4.3 Data Collection procedures

This research was to investigate that either there is any relation between board composition and firm performance, and If there is any relation, then either independent board will reflect higher firm performance or not and how Independent board effect firm performance in Pakistani listed companies so in this kind of research board composition was studied by its two components, Independent and Dependent board. The independent variable board composition was used as categorical variable and the board composition was classified in two categories, which were its two components.
Secondly firm’s performance was evaluated through the following components,

1. Return on Assets (ROA)
   \[
   \text{Return on Assets (ROA)} = \frac{\text{EBIT (Net profit)}}{\text{Average total Assets} - \text{in book value}}
   \]

2. Return on Equity (ROE)
   \[
   \text{Return on Equity (ROE)} = \frac{\text{Net profit}}{\text{Average total equity} - \text{in book value}}
   \]

3. Tobin’s Q
   \[
   \text{Tobin’s Q} = \frac{\text{Market value of equity} + \text{Book value of debt}}{\text{total of assets} - \text{in book value}}
   \]

Moreover the data about the selected sample of 91 listed firms, which was used for the evaluations, was obtained from Annual reports of Karachi Stock exchange (KSE-100 Indexed) for the year 2010. The above mentioned Ratios i.e. ROA, ROE and Tobin’s Q was computed from the data gathered from these Annual reports.

4.4 Data Analysis Technique

The data was analyzed through Empirical analysis with the help of SPSS software. The Independent sample t-test and group Statistics were used as the most appropriate techniques for Data Analysis. Independent sample T-test was applied because the independent variable of the study was categorical variable showing two categories Independent and Dependent board. The Independent sample T-test showed the difference between two categories and showed which category has greater performance and what the significance of their results was.

Moreover Levene’s test for equality of variance was also applied to find the variance in the measures of firm’s performance and also to show the significance of these components of firm’s performance.

5. Results and Discussions

This Section contains the statistical results of the variables selected for current study. This section presents the Group statistics and Independent sample T-test results of variables, as well as theoretical discussion on these results. Furthermore the results of each hypothesis are also discussed in this section.

5.1 Group Statistics

Table 1 shows the group statistics of board composition and components of firm’s performance such as ROA, ROE and Tobin’s Q. The above table 1 shows that number of companies heaving Independent directors in their board was 51 in the selected sample and the companies heaving only Dependent directors in their board were 40, so a total of 91 companies were analyzed in this study.

The means for independent board for ROA, ROE and Tobin’s Q are 14.3781, 33.9614 and 51.225 respectively, which shows that the mean for independent board were more as compared to dependent board means such as ROA, ROE and Tobin’s Q for dependent board are 6.0740, 11.8007 and 27.2648 respectively. In Independent board the mean for Tobin’s Q is 51.225 which more as compared to the means ROE (33.9614) and ROA (14.3781), showing that the significance of Tobin’s Q is more as a measure of firm performance as compared to ROE and ROA. ROE is also showing significant weight but ROA has relatively low weight as measure of firm’s performance. The next column lists the standard deviations of independent board and dependent board, showing that there is a significant difference among groups and last column shows standard error in means.

5.2 Independent sample T-test

Table 2 shows the Independent sample T-test for equality of means and Levene’s test for equality of variance of board composition and components of firm’s performance. The first column shows Levene’s test representing the significance of each component or measure of firm’s performance. The significance p-value of ROA, ROE and Tobin’s Q are .105, .042 and .428 respectively, showing that as compared to the
level of significance of 0.05 the value of ROE is of significance because its value is less than 0.05 but Tobin’s Q and ROA does not show significance because their p-value is greater than 0.05. Therefore levene’s test shows that ROE is significant measure of firm’s performance and are showing significant firm’s performance. For rejection or acceptance of our hypothesis the next column of T-test provides further explanations.

The second column shows the Independent sample T-test and the p-values for the acceptance or rejection of our hypotheses. So the next section will discuss this T-test for each of the hypothesis acceptance or rejection.

5.3 Discussion on results of Hypotheses testing

This section will present the discussion on results of the tests for each of the hypothesis.

5.3.1 First Hypothesis

\( H_1 \): Companies having Independent board composition show higher ROA, which as a result show greater firm’s performance.

Table 1 of group statistics showed that the mean of ROA of independent board (14.3718) is greater than mean of dependent board (6.0740), which means that the companies having independent board are having greater ROA as compared to companies having dependent board, which as a result is showing greater firm’s performance. So for the significance of these results independent sample T-test was conducted as shown in table 2. T-test shows that the t-value of ROA is 3.164 which is greater than +2 so the results are significant, furthermore p-value of ROA is .002 which is less than 0.05 (level of significance), so we accept our hypothesis. This means that companies having independent directors are showing greater ROA, which as a result shows greater firm’s performance.

5.3.2 Second Hypothesis

\( H_2 \): Companies having Independent board composition show higher ROE, which as a result show greater firm’s performance.

Table 1 of group statistics showed that the mean of ROE is of independent board (33.9614) is greater than mean of dependent board (11.8007), which means that the companies having independent board are having greater ROE as compared to companies having dependent board, which as a result is showing greater firm’s performance. So for the significance of these results independent sample T-test was conducted as shown in table 2. Levene’s test value is .042 which is less than 0.05 showing significance of the relation and T-test also shows that the t-value of ROE is 3.878 which is greater than +2 so the results are significant, furthermore the p-value of ROE is .000 which is less than 0.05 (level of significance), so we accept our hypothesis. This means that companies having independent directors are showing greater ROE, which as a result shows greater firm’s performance.

5.3.3 Third Hypothesis

\( H_3 \): Companies having Independent board composition show higher Tobin’s Q, which as a result show greater firm’s performance.

Table 1 of group statistics showed that the mean of Tobin’s Q of independent board (51.2225) is greater than mean of dependent board (27.2648), which means that the companies having independent board are having greater Tobin’s Q as compared to companies having dependent board, which as a result is showing greater firm’s performance. So for the significance of these results independent sample T-test was conducted as shown in table 2. T-test shows that the t-value of Tobin’s Q is 6.916 which is greater than +2 and highest among results of all measures so the results are of greater significance, furthermore the p-value of Tobin’s Q is .000 which is less than 0.05 (level of significance), so we accept our hypothesis. This means that companies having independent directors are showing greater Tobin’s Q, which as a result shows greater firm’s performance.

6. Conclusion and Recommendations

Based on results and analysis it is concluded that companies having independent directors in their board composition will show greater firm performance. Results showed that the listed companies of
Pakistan at Karachi stock exchange, which have independent board members in their board, were showing greater return on assets (ROA), return on equity (ROE) and Tobin’s Q. As these were the measures or components of firm’s performance, so it means that the listed companies of Pakistan at Karachi stock exchange with independent board were showing greater firm’s performance.

As first Hypothesis was that the companies having independent board of director will show greater ROA, which as result will show higher firm’s performance. It was shown by analysis that the companies having Independent board were having greater ROA as compared to companies with only dependent directors in their board, so first hypothesis is accepted.

Second Hypothesis was that the companies having independent board of director will show greater ROE, which as result will show higher firm’s performance. It was shown by analysis that the companies having Independent board were having greater ROE as compared to companies with only dependent directors in their board, so second hypothesis is also accepted.

Third Hypothesis was that the companies having independent board of director will show greater Tobin’s Q, which as result will show higher firm’s performance. It was shown by analysis that the companies having Independent board were having greater Tobin’s Q as compared to companies with only dependent directors in their board, so third hypothesis is also accepted.

From the above discussion it is recommended that in order to get greater firm performance companies must include independent directors in their board. In order to cultivate success independent board is most important key factor. So this key factor should be incorporated by company to get higher firm’s performance.

A direction for future research also exists in this area. A wider panel data should be used in order to get more accurate and generalize able results. The data for 5 to 10 years will show more accurate averages of ROA, ROE and Tobin’s Q and will help in analyzing more accurate results. Furthermore firm performance can also be measured by others ratios such as Return on investment (ROI) and Maris ratio etc, so these ratios should also be included in measuring firm’s performance. On other hand board composition variable should also be computed as continuous variable showing the percentage of independent directors in that particular company. To find the cause effect and positive and negative relationship between board composition, correlation and regression tests can also be applied. There may also be some other independent variables such as board size, chairman duality, CEO compensation structure, audit committee and ownership structure etc, which can be included and their combined effect on performance of listed companies of Pakistani stock exchange can also be studied by further studies in this area.
References


Annexure

Table 1

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