

# **CORPORATE GOVERNANCE AND EXTERNAL FINANCE: AN EMPIRICAL STUDY OF THE BANKING AND FINANCIAL SECTOR OF THE KARACHI STOCK EXCHANGE**

**Zainab Daud<sup>1</sup>, Laila Taskeen Qazi<sup>2</sup> and Atta-Ur-Rahman<sup>3</sup>**

## **Abstract**

*This research explains the relationship between corporate governance and external finance. It uses a set of independent variables mainly related to disclosure and transparency to check the corporate governance level of the firm and its effect on external finance. The analysis of data of 30 companies listed on the KSE is done for a time period spanning over 5 years from 2007 to 2011. The empirical findings of the study depict a positive relationship between good corporate governance practices and external financing thus validating the notion that the companies tend to follow better governance practices when they need to generate funds externally. The study uses size as a control variable and finds out that larger firms are more prone to be following a good standard of corporate governance as they have to access more external finance.*

**Keywords:** Corporate Governance, External Finance, Disclosure, Transparency

**JEL Classification:** G 340

---

<sup>1</sup> Department of Management, Institute of Management Sciences, Peshawar, Pakistan

<sup>2</sup> Department of Management, Institute of Management Sciences, Peshawar, Pakistan

<sup>3</sup> Department of Management, Institute of Management Sciences, Pakistan.

### **Introduction**

External finance is an essential feature in today's world as companies strive to grow and expand. Generating enough finances is not an easy task in these tough economic environments. The ownership structure of a company determines whether a company relies more on internal finance or external finance. Other factors like enforcement of law, economic conditions and developments in the markets also play a role here. Research suggests that changes in macro environment dictate the access to external finance by a firm for instance, changes in business cycle and monetary policy (Kashyap, Stein and Wilcox, 1993; Oliner and Rudebusch, 1996a, 1996b). However researches also suggest that at a micro level the firm's vulnerability to changes in macro-economic conditions dictate the access to external finance such as a younger and a smaller firm will be more affected by change in monetary policy. Studies show that financing pattern of different sizes of firms and the level of market development are related to some extent (Beck, Thorsten, Kunt & Maksimovic, 2008). External finance is accessed less by smaller firms due to constraints faced by them as a result of informational asymmetries. However, larger firms find it easy to access finance externally through a wide variety of sources like leasing, banks, suppliers and equity investments.

Transparency and disclosure is one of the key aspects of corporate governance. Investors and fund providers always grant their funds with an objective of getting returns on it. Therefore they always want to gather the maximum information about the companies they want to invest in. Most of the investors are risk averse and in cases of less information about a given company they expect higher returns for the additional amount of risk they are preparing to undertake. This view is agreed upon by a large body of research (Hope, Thomas and Vyas, 2009; Easley and O'Hara, 2004). Therefore by increasing the amount of information provided to the fund providers, or in other words the transparency and disclosure, a firm cannot only

reduce the risk taken by the providers of funds but also the additional amount of cost the firm will have to undertake for accessing funds externally (Sleifer & Wolfenzon, 2002). This leads to recognizing another important aspect of determining the advantage of better disclosure practice that is the effect it has on the rate of returns of investors (Diamond & Verrechia, 1991). Investors tend to reduce their rate of return for companies disclosing more information following corporate governance procedures. Reducing informational asymmetries increase investment opportunities of firms and thus can lead to more profitable outcomes.

This study tends to contribute towards the existing literature by finding a relationship between corporate governance and access to external finance. The study recognizes the importance of corporate governance for a firm in need of funds. With good governance, investors rely more on the managerial practices and have more faith in the company as they have a chance to monitor the actions of firms (Bushman & Smith 2001). Thus they provide their funds more readily. Good governance also tends to reduce the agency problem between shareholders and managers of the firm and provide long-term advantages to the investors and shareholders. This is considered as an additional benefit of corporate compliance and serves as a driving force for investors granting their funds. Therefore the study while investigating the relationship of corporate governance and external finance found out a significant positive relation between these two variables. The findings depicted that companies planning to access more finance externally tend to follow good governance. This result was parallel to the findings of Durnev and Kim (2005) who also found out that, firms follow higher levels of corporate governance when they want to raise more capital. In the context of this research study, it can be inferred that companies tend to become more transparent and disclose more information to the public when they intend to acquire funds from them.

In countries like Pakistan the legal and regulatory environment is not as strong. The World Bank Report on Observance of Standards and Codes (ROSC) provides an assessment of corporate governance practices in Pakistan in the year 2005. The report suggests that although corporate governance related awareness is on the rise and reforms and regulations have improved, investor protection still remains a key issue. The reasons for this considered to be concentrated family ownerships and reduced objectivity of boards. Also, the report says that in past companies relied more on less costly sources of external finance like low cost loans and considered equity as an inefficient way of raising funds; however such a perspective is on the verge of change.

The check and balance system is not well developed and is weak in most of the situations. The lines of authorities are not well defined. Therefore investors and external providers of funds find it difficult to get any guarantee about the credibility of the firms before granting their funds. Corporate governance can serve as check system only if it is properly followed by the firms. This research identifies some important factors of corporate governance that can be used to check the credibility and disclosure level of firm and hence can help investors in making decision about a particular firm to invest in. Also, the investors and public in Pakistan need to be more informed about the code requirements that should be followed by firms. This study helps to improve the level of awareness in this regard. The study identifies certain factors like disclosure about remuneration committee or board size etc that can be easily checked by the investors while deciding upon a company to invest into even though if they are not well informed about the corporate practices. The study also improves upon the body of research done in Pakistan with specific reference to the banking and financial sector.

The rest of the study is sequenced in the following manner to give a more meaningful direction to the research. Section 2 describes the relevant literature pertaining to the access of finance by firms and

the importance of corporate governance in this regard. Section 3 explains the methodology undertaken for the given research, the sources of data collection and the specific models used in the study. Section 4 focuses on the analysis and findings of the research by explaining the results of the study. Section 5 gives the conclusion in a precise and comprehensive way.

### **Literature Review**

Financing patterns of firms are known to vary across countries. Studies show that these differences are mainly because of variances in the legal and financial environments of countries (Rajan & Zingales, 1998; Shleifer & Vishny, 1998; Gertler 1988; Laporta, et al., 1997). It is known that firms obtain less external finance in countries with weak legal and financial system which in turn results in less growth. A relatively recent research by Booth, Aivazian, Maksimovic and Kunt (2001) suggested that financing pattern differences in developed and developing countries are governed by the same variables. However, Maksimovic and Demirguc-Kunt (1999) concluded that the development of stock markets and banks, accounts for such varying patterns. La porta, Silanes, Shleifer and Vishny (1997) were of the view that the legal environment of a country plays a role in obtaining finance from suppliers of funds. Using data from 49 countries they found out that when legal environment is more protective, investors are more willing to invest their funds. In such cases they don't expect their interests to be impounded by owners and managers of firms and the trust level increases.

Literature further suggested that small firms rely more on informal sources of external finance in countries with weak legal systems. On the contrary, Beck, Kunt and Maksimovic (2004) found out after a firm level survey in 48 countries that small and medium sized firms use a wider source of external finance including leasing, debt and equity finance. They also found out that in relation to size of firm, large firms use more external finance than smaller firms especially finance from

banks. Using a data sample of 10,000 firms from 80 countries, Beck, Kunt, Leaven and Maksimovic (2004) confirmed this view and suggested that smaller and younger firms are more likely to face greater financing obstacles as compared to larger and older firms. On the other hand a research on Spanish firms by Saurina, Gonzalez and Lopez (2007) indicated that smaller, riskier and younger firms are more prone to use external means of financing than internal and also take advantage of such activity by disclosing more bank relationships such as number of collateral required and number of banks that gave loans. It is also known that foreign owned firms find fewer obstacles in obtaining external finance as they can easily access foreign funds (Harrison & Macmillan, 2003). Oliver and Rudebusch (1992) suggested that listed firms could easily fulfil financial needs because reporting and listing requirements of stock exchange reduce informational asymmetries.

Investors play important role as providers of funds. Financial transparency can serve as an essential element in this regard. Investors limit their stream of funds when informational uncertainty rises or they can respond by increasing their required rates of return thus limiting external finance sources and investment opportunities of firms. This problem can be solved by removing the informational asymmetry and allowing investors to better understand the firm (Smith & Bushman, 2001). Such informational risk can be reduced only if investors consider the information provided by firms to be transparent. Hope, Thomas and Viyas (2009) conduct a research on a sample of private firms in about 68 countries and find out that the transparency problem can be solved by using the services of an external auditor. The external auditor being a third party gives the company an edge. Precision can also be improved by external auditors (Raman, Khurana & Boone, 2008). However, most private firms do not have themselves reviewed by external auditors due to the increase costs (Luez, Hail & Burgstahler, 2006).

Corporate governance is considered as a means through which the interests of shareholders and other suppliers of funds are fulfilled.

Bebchuk and Weisbach (2009) in their research find out that economic crises are the main reasons why the role of shareholders in corporate governance systems is debatable as for some people giving more power to shareholders is a better choice because it safeguards their interests. While for others it is just welcoming more problems because activism of minority shareholders can serve problems in certain situations. Cohen, Ferrell and Bebchuk (2004) are of the view that more restrictions on shareholder power can reduce firm value as this causes managers in the firm to readily adopt practices like take over readiness.

Ownership concentration can also play a role in certain situations where agency problems are taken into consideration. A controlling shareholder can play either a positive or a negative role (Vishny, Shliefer & Morck, 1988). They play positive role by monitoring managerial actions and conversely can play negative role by using their controlling position for personal benefits. Hope, et al., (2009) are of the view that financial transparency and ownership can together have an interactive effect. Financial transparency can limit the negative role of controlling shareholders. In addition to this we also find literature suggesting that controlling shareholders can be advantageous in allowing long term relations between firms and external providers of funds by making negotiations easier and increasing business focus (Lel, Ellul & Guntay, 2007).

According to Bebczuk (2005), there are two main instruments that outsiders have to control the actions of people inside the firm. 1) regulatory and legal environment 2) corporate governance standards. Once these mechanisms are in place, outsiders can easily evaluate and challenge the actions of the firm. Thus we can infer that the firms with better governance are likely to perform better. A study of India done by Mohanty (2003) predicts such a relationship to exist. He suggests that companies with good governance perform better financially than those with poor governance. Similar results were found in Pakistan by examining 50 non financial listed firms where

corporate governance index (CGI) had close correlations to performance indicators like ROA and ROE (Tariq & Butt, 2008). However we also find some literature suggesting that the relationship between firm performance and corporate governance can be negative (Lehmann & Weignand, 2000) or none (Demsetz & Villalonga, 2001).

Durnev and Kim (2005) in consensus with this research objective predict that firms practice better corporate governance when they are in need of greater external financing, have better investment opportunities and higher concentration of ownership. Such firms in turn are valued higher. Their research is based on data from 27 countries. However, they also conclude that in countries with weak legal systems corporate governance is valued higher as in such cases governance practices attempt to compensate for the weak regulatory systems. The 3 factors external finance, investment opportunities and ownership concentration play important role in relation to governance. Durnev and Kim (2005) put the basis of the perception very simply. External finance matters as a company will be less likely to spit into a well from which it plans to drink. Investment opportunities matter because a company won't commit crime if it has something of worth to lose and ownership concentration matters because a company won't plan to steal from itself.

A large body of research suggests a close relationship between level of corporate governance and firm value. Black (2001) in his research on Russian firms is of the view that there exists a strong relationship between corporate governance index and share prices. 1 standard deviation increase in governance index increases firm value by 9% (Durnev & Kim, 2005). Similar results are found by Black, Jang and Kim (2006) who took a large sample of 525 Korean firms. They checked elements like board structure and found out that firms with 50% outside directors are valued higher. However they don't find a close association between profitability and level of corporate governance. We also find evidence that more disclosure can lead to

higher value of firm as shown by Limpaphayom and Zhou (2007), Black, Jang, Kim and Park (2009) and Rachinsky (2007).

There is also some evidence of association between corporate policies and leverage of firm. There are mixed views in this regard. Arping and Sauter (2009) using a sample of Dutch firms find out that an improvement in corporate policies reduces agency conflict and in turn trims down level of leverage by reducing significance of debt as a disciplining instrument. Also, there is evidence that firms with lower leverage are more likely to disclose more (Berglof & Pajuste, 2005). Further, Fulghiere and Suominen (2008) suggest negative association between corporate governance and leverage implying that poor governance increases leverage. On the other hand, a contradicting view is that good corporate governance encourages managers to take risks and as a result leverage increases (Florakis & Ozkan, 2009) good corporate governance signals investors and lenders about better quality of firm thus reducing cost of debt and enhancing leverage (Klock, 2005).

Research also suggests a close relationship between external finance and disclosure quality of firms. Firms that are more transparent with less informational asymmetries can easily access external finance because when a firm is less opaque, there are fewer chances of moral hazards by firm insiders and firm quality can be easily determined (Mitton 2002, Palepu & Healy, 2001). Hyytinen and Pajarinen (2005) study Finnish firms and suggest a similar view. They predict that firms with high quality disclosure are the ones that grow and such a quality disclosure helps them to access more external finance which in turn makes such growth possible. In addition to this evidence by Seppanen (2000) also suggest such type of association to exist by employing a sample of 41 listed firms in Finland. He finds out that frequency and timing of accounting disclosure are considered really important by managers as means of communication between firms and investors and such firms differ in their external financing arrangements due to differences in various types of disclosures. In a

study of Czech firms Makhija and Patten (2004) also predict a positive relationship between extent of disclosure and external ownership. However, there are also costs associated with quality disclosure. Such costs can be direct (e-g selecting a prestigious auditor) (Hyttinen & Takalo, 2002) or indirect (Healy & Palepu, 2001).

Accounting discretion as permitted by GAAP can be used in an efficient or an inefficient way. It allows for a certain amount of judgment while preparing financial statements. Such a discretion can be used in a constructive way for maximizing shareholder wealth or conversely in a negative way by opportunist managers. Most of the literature suggests an existence of second type of behavior (managerial opportunism) (Fields, 2001; Williams & Menon, 2004). Similarly, Brown, Rajgopal and Venkatachalam (2008) in their research find out a positive relationship between accounting discretion and poor quality governance. This shows when governance mechanisms are not properly intact; there are more chances of managerial opportunism leading to misuse of interest of shareholders.

Stulz, Doidge and Karyoli (2004) predict that better governance is an important driver in share price increase. Moreover Black, et al., (2006) in their study of Korean firms find evidence that governance is related to firm size, risk and equity, with larger riskier firms with greater equity finance needs being better governed. Further, improving upon our views of association between long term profitability and corporate governance they find out that more profitable firms are not well governed.

An important research done by Akhtarudin, Hossain, Hossain and Yao (2009) shed light upon disclosure quality in corporate governance and are of the view that board size and number of non-executive directors on board have positive relations with the disclosure quality and transparency of firms. They also suggest that the corporate governance rules should specify a specific number of independent directors that should be present on board so that corporate practices

could be improved. This practice will also help in improving the performance of firms as following a set system will give a proper direction to the operations of the firm. However, Palia (2001) and Bhagat and Black (2002) find out that the performance does not improve with the increase in level of outside directors on board. They find out no or negative relation between performance and independence.

Studying the corporate governance challenges faced by the South Eastern European countries (SEE) Babrika and Miclus (2007) are of the view that there are serious problems when it comes to the implementation of codes of corporate governance. The rules in the codes are not mandatory as long as they become the listing requirements of stock exchange. Using a questionnaire addressing five important areas including rights of shareholders, disclosure and transparency, role of stakeholders, board and equal treatment of shareholders, they find serious problems with the role of stakeholder and transparency sector. Improvements in the implementation of the code can however help in signalling investors providing external finance easily.

The relation between corporate governance and external finance is well supported by research. Most of the existing literature including findings by Durnev and Kim (2005) suggest a similar view in consensus with this research that the level of corporate governance followed by firms can be used as a predictor for finding information about external finance. Corporate governance is an important factor and is not only related to performance and value of firms (Black, 2001, Limpaphayom & Zhou, 2007) but also leads to greater profitability and share price increase (Stulz, et al., 2004). Good governance also tends to reduce costs of debt and thus improves leverage (Klock, 2005). The significance of corporate governance for investors cannot be ignored and a large body of research findings form consensus that corporate governance is valued by investors as it helps to protect their rights (Bebchuk & Weisbach, 2009). Thus the relation between

corporate governance and accessing external finance is not unfound and it holds that companies practice good governance when they are intending to get more funds from investors.

### **Methodology and data collection**

For analysing the relation between corporate governance and external finance in Pakistan, the study used information from 30 companies listed on the Karachi Stock Exchange. The study aims to attain the required objectives by taking these firms from the banking and financial sector. A time period of 5 years has been selected from year 2007 to 2011. The main source of information for finding out data on the required variables has been the annual reports of the companies that are available on the company sites. However, data about the market capitalization of the firms has been obtained from the web using [brecorder.com](http://brecorder.com).<sup>4</sup>

### **Variable Formation**

As the study strives to find the relation between corporate governance and external finance, some key variables that determine the level of corporate governance and external finance are identified.

According to Javed and Iqbal, (2010) disclosure quality is one of the major determinants of corporate governance. A company should be transparent about all its activities so that uncertainties about future prospects can be minimized and the risks be reduced. In an attempt to find the level of disclosure and transparency the study identifies 6 important factors that can explain variations in this regard. These variables include board size, number of independent or nonexecutive directors on board, disclosure of remuneration committee, staff ownership information, disclosure of remuneration of CEO, board directors and other executives and disclosure of biographies of board members (Javed and Iqbal, 2010).

---

4-<http://www.brecorder.com/market-data/karachi-stocks>

**Board size** gives information about the number of members on board (Akhtarudin et al., 2009). The information about this variable is taken from the annual reports of the companies. The statement of compliance with the code of corporate governance clearly states the number of directors on board.

The **number of Ned's** is also stated in the annual reports of the companies in the statement of corporate compliance (Bhagat and Black, 2002; Palia, 2001). This information has been collected for all the companies in the sample by individually looking it up in the annual reports.

**Disclosure of remuneration committee** is provided in the annual reports under the company information section (Javed and Iqbal 2010). A value of 1 has been assigned if such a disclosure is made whereas as a value of 0 has been assigned if such a disclosure is not found.

**Staff ownership** information is provided in the annual reports under the categories of shareholder section (Javed and Iqbal 2010). For the purpose of collecting this data a value of 1 has been assigned if staff ownership is present in the company disclosed in the patterns of shareholding section and a value of 0 has been assigned if the staff and executives don't have any ownership in the company.

**Remuneration of CEO, directors and other executives** should be clearly stated in the notes to financial statements (Javed and Iqbal 2010). A value of 1 has been allotted for the presence of this information while 0 values has been allotted for absence.

**Biographies of board members** are an important component of the annual report. However not all the companies in the sample have provided the biographies of their board members (Javed and Iqbal 2010). This information has also been collected on the basis of assigning 0 and 1 value for absence and presence of the information respectively

The *size* of the companies in the sample has been calculated as the log of total assets (Black et al., 2006).

This research finds the relation of *external finance* with all the above-mentioned variables. External finance can be made available through the use of debt or equity. The study focuses on equity as a source of external finance (Makhija and Patten, 2004; Javed and Iqbal 2010). But as external finance cannot be measured directly as indicated by previous literature this research employs the use of log of percentage of shares not taken by top 5 shareholders multiplied by market capitalization of the firm as a measure of this variable. The percentage of shares not taken by top 5 share holder has been calculated using information given in the pattern of shareholding in the annual reports. Market capitalization data for every year has been taken from data providing website.

### **Hypothesis**

The main objective of this research is to find out whether there is some relation between corporate governance and external finance. Most of the previous literature has supported this view (Javed and Iqbal 2010; Kim and Durnev 2005). In order to validate this proposition using a set of different variables, this study aims to contribute towards the said view. The general belief is that companies are supposed to be practicing a good standard of corporate governance if they are in need of external finance. The following hypothesis has been tested to find such an association:

Ho: there is no relationship between good corporate governance and external finance.

H1: there is a relationship between good corporate governance and external finance.

In the process of finding an answer to the above core hypothesis we develop some sub hypotheses that help in validating the view.

### ***Sub hypothesis 1***

Board size is one of the important factors that need to be considered while checking the level of corporate governance. It is known that the larger the board the more are the chances of better corporate decisions as the level of independence increases with the size of the board. Thus board size serves as an important measure of the level of corporate governance and transparency. As it can be considered as an essential element for ensuring corporate governance and so effect external finance the study tested the following hypothesis:

Ho: there is no relationship between board size and external finance

H1: there is a relationship between board size and external finance

### ***Sub hypothesis 2***

The number of NED's on the board directly notifies about the amount of independence on the board and so acts as an essential factor in determining the amount of corporate governance. The more there are independent directors on the board the more are chances of better decisions and governance. Its linkage to external finance is determined by the following hypothesis:

Ho: there is no relationship between the number of NED's and external finance

H1: there is a relationship between the number of NED's and external finance

### ***Sub hypothesis 3***

The presence of remuneration committee is necessary in a company and the company should disclose this information clearly

in the annual reports. Remuneration committee helps in determining the appropriate compensation packages for everyone providing services to the company. Such a disclosure helps fund providers in knowing the fact that there is someone responsible for the proper use of resources of the company and ensuring everyone their precise amount of compensation. As a result of this there are fewer chances of thefts and misuse of funds provided. In order to find an association between such a disclosure of remuneration committee and external finance the study aims to verify the following hypothesis in an attempt towards validating the relationship between corporate governance and external finance:

Ho: there is no relationship between disclosure of remuneration committee and external finance

H1: there is a relationship between disclosure of remuneration committee and external finance.

#### ***Sub hypothesis 4***

The exact amount of remuneration of the CEO, directors and other executives needs to be disclosed in the annual reports. This factor is used as a variable in the study for the fact that it gives information to the share holders that the upper management is getting its due share for working for the company and there is less probability that they will take any decisions for their personal benefits overlooking their responsibility toward the shareholders and members of the company. Thus it serves as a determinant of corporate governance. The following hypothesis has been used in this regard:

Ho: there is no relationship between disclosing remuneration of CEO, directors and other executives and the external finance

H1: there is a relationship between disclosing remuneration of CEO, directors and other executives and the external finance

***Sub hypothesis 5***

Staff ownership serves as another important factor as it tells about the holdings of the employees of the company and their trading in the shares. A company follows corporate governance while giving the public information about staff ownership. The study uses the following hypothesis to validate its relationship to external finance:  
Ho: there is no relationship between staff ownership and external finance

H1: there is a relationship between staff ownership and external finance

***Sub hypothesis 6***

Biographies of the board members should be disclosed according to the code of corporate governance. This is necessary as the public gets to know that the company has selected the right people for the right jobs. The appointed members have the desired qualification and ability to serve for the company. The company must disclose about the experience of the members in their fields and information about their independence. This ensures the investors that there are capable and competent people in the company on whom they can rely and who will take decisions in the best interests of the company and its members. The association of this factor of corporate governance and external finance has been checked through the following hypothesis:

Ho: there is no relationship between disclosing biographies of members of the board and external finance

H1: there is a relationship between disclosing biographies of members of the board and external finance

***Sub hypothesis 7***

Size plays an important role in the said study and is known to have important relations with external finance and the level of

corporate governance. Although there are mixed views in this regard but it is generally believed that a larger firm will adopt better governance and access more external finance. In order to confirm such findings the study employs size as an essential variable and tests the following hypothesis

Ho: there is no relationship between size of a firm and external finance

H1: there is a relationship between size of a firm and external finance

In order to validate the focal relationship the study first attempts to confirm all the sub hypotheses that will lead towards finding the final conclusion. Using panel regression, the model given below has been tested.

$$EF_i = \alpha + \beta_1 BoasZ_i + \beta_2 NED_i + \beta_3 RemC_i + \beta_4 RemB_i + \beta_5 StaffOwn_i + \beta_6 Bio_i + \beta_7 Size_i + \varepsilon_{it}$$

Where  $EF_i$  is the external finance and is the dependent variable. It is measured by percentage of shares not owned by top 5 into market capitalization of the firm. The rest of the variables are described as under,

$BoasZ_i$  refers to the number of board members

$NED_i$  refers to the number of non executive directors on board

$RemC_i$  refers to the disclosing of remuneration committee

$RemB_i$  refers to disclosure of remuneration of CEO, directors and other executives

$StaffOwn_i$  refers to the staff member ownership

$Bio_i$  refers to disclosing the biographies of board members

$Size_i$  refers to the size of the firm

$\varepsilon_{it}$  is the error term

### Analysis

For the purpose of analyzing the relationship between the corporate governance and the external finance accessed by a firm the study identified seven explanatory variables. The data of 30 companies spanning over 5 years has been used.

### Summary Statistics

In terms of corporate governance, the data indicates that 89% of the sampled companies do not disclose directors' biographies whereas only 11% companies disclose directors' biographies. 37% companies do not disclose directors' remuneration however 68% companies provide description of the directors' remuneration. Moreover 86% of the sampled companies do not have a formal remuneration committee. Only 16% of the sampled companies have a proper remuneration committee for ensuring transparency in terms of director's remuneration. Furthermore, 53% companies depict staff ownership and 43% depict greater proportion of other financing modes as compared to staff ownership. The empirical properties of other variables included in the study are given below in table 1.

**Table 1:**

*Summary Statistics*

| Variable         | Mean  | Median | Std. Dev. | Skewness | Ex. kurtosis |
|------------------|-------|--------|-----------|----------|--------------|
| External Finance | 8.673 | 9      | 1.033     | -0.049   | -0.786       |
| Size             | 9.833 | 10     | 1.126     | 0.218    | -0.778       |
| Board size       | 7.887 | 8      | 1.612     | -0.259   | 0.650        |
| NED              | 5.993 | 6      | 1.866     | -0.208   | 0.193        |

As clearly shown, *size* is showing the highest mean among all the variables followed by the mean for *external finance*, which is the dependent variable. The highest median can be observed in case of *size*. The table shows *number of NED's* has the highest standard deviation followed by *board size* and *size* of the companies. The high standard deviation of *size* indicates that there are variations in the sizes of the companies selected in the sample and are not of the same size. Most of the variables in the data are showing negative skewness giving an indication that the data is concentrated toward the long left tails and show the possible effects of decrease in the variables. Almost all the variables in the data have a kurtosis less than 3 indicating flat distributions and the possibility of having less outlier.

## Empirical Results

Table 2 below contains the empirical results of the study generated using External finance a dependent variable. Using a panel data of 5 years for 30 financial sector companies, four models have been employed including Pooled OLS, Fixed Effect Model, Random Effect Model and Weighted Least Square Model. For all the four models results have been presented in Table 2 below.

**Table 2:**

*Empirical Results, Dependent variable: External Finance*

| Variables   | Pooled OLS            |               | Fixed Effect          |         | Random Effect             |               | Weighted Least Square  |               |
|---|-----------------------|---------------|-----------------------|---------|---------------------------|---------------|------------------------|---------------|
|   | Coefficient           | p-value       | Coefficient           | p-value | Coefficient               | p-value       | Coefficient            | p-value       |
| Size  | 0.5831                | 0.0000**<br>* | 0.1564                | 0.2406  | 0.4771                    | 0.0000**<br>* | 0.6094                 | 0.0000**<br>* |
| Biographies of Board Members  | 0.1766                | 0.2251        | 0.0864                | 0.7548  | 0.0718                    | 0.7121        | 0.0484                 | 0.7412        |
| Remuneration of Board Members   | -0.0061               | 0.9803        | 0.0432                | 0.7942  | 0.044                     | 0.7736        | 0.0681                 | 0.3954        |
| Remuneration committee  | 0.2949                | 0.0806*       | -0.0712               | 0.5842  | 0.1127                    | 0.571         | 0.2301                 | 0.0557*       |
| Staff ownership   | -0.2004               | 0.2978        | -0.1602               | 0.5326  | -0.1511                   | 0.3149        | -0.1155                | 0.1311        |
| Board size  | 0.1988                | 0.0053**<br>* | 0.2377                | 0.137   | 0.2172                    | 0.0119**      | 0.193                  | 0.0000**<br>* |
| NED   | -0.0602               | 0.2411        | -0.0146               | 0.8612  | -0.0444                   | 0.477         | -0.0552                | 0.0770*       |
| Durbin Watson   | 0.570840              |               | 1.504375              |         |                           |               |                        |               |
| R-Squared   | 0.6122                |               | 0.8599                |         | NA                        |               | 0.8449                 |               |
| F-statistic (p-value)   | 32.0298 (2.50e-26***) |               | 19.2815 (9.30e-34***) |         | NA                        |               | 110.5147 (3.05e-54***) |               |
| White test of Heteroskedasticity (LM Test statistic (p-value))        |                       |               |                       |         | 30.9699 (0.4168)          |               |                        |               |
| Chow Test for differing group intercepts (F-test statistic (p-value)) |                       |               |                       |         | 6.8955 (2.65256e-014***)  |               |                        |               |
| Breusch-Pagan test (Chi-Square test statistic (p-value))              |                       |               |                       |         | 75.4093 (3.82577e-018***) |               |                        |               |
| Hausman test (Chi-Square test statistic (p-value))                    |                       |               |                       |         | 9.0899 (0.2462)           |               |                        |               |

\*\*\*Significant at 1%, \*\*Significant at 5%, \*Significant at 10%

The data has been tested for heteroskedasticity using white test (see Table 2). The insignificant results of white test proved the data to be homoscedastic. Likewise, the data has also been tested for the problem of autocorrelation using Durbin Watson test (see Table 2). The significant test results and Durbin Watson value of 0.57084 indicated the existence of autocorrelation problem in the data. Due to the problem of autocorrelation the results of the pooled OLS have been invalidated. Furthermore the results of panel diagnostics given

in Table 2 also nullify the pooled OLS results. This can be confirmed from the significant results of Chow test indicating superiority of fixed effect model over pooled OLS. Moreover the significant results of Breusch-Pagan test indicate dominance of Random effect model over Pooled OLS. However insignificant results of Hausman Test verify that GLS estimates are consistent and results of the random effect model are more reliable as compared to the results of fixed effect model. In addition to the Random effect model, Weighted Least Square model has also been employed depicting interesting and significant results. The results of the Random Effect model and Weighted Least Square are more consistent due to the fact that these models also resolve the issue of autocorrelation existing in the data.

The empirical findings of Random Effect, Pooled OLS and Weighted Least Square Model depict that in an attempt to find a relationship between corporate governance and external finance the board size of a company contributes significantly and positively. This implies that the larger the board size the better is the corporate governance and the easier it is for the company to access external finance as investors give value to good governance practices.

The sub hypothesis 2 has been checked by looking at the p-value for the number of NED's on the Board. The relationship between external finance and number of NED's is significant and negative as shown by the coefficient value given by the weighted Least Square Model. The result is contradictory to the literature, which suggests that more independent directors lead to better governance and as a result to easily accessing external finance. The reason for such a contradiction is that the sample includes companies from Pakistan where the legal and corporate system is not well developed nor is the Pakistani public acquainted with the system of governance. Thus the importance of NEDs is not well understood by the public and while presenting their finance to the companies they don't value the presence of NEDs in their decisions about selecting the suitable

companies. The presence or absence of NEDs makes no difference to the public hence explaining our opposing results.

For the purpose verifying relationship of disclosure about remuneration committee and external finance sub hypothesis 3 has been checked. The p-value is 0.05 according to the Weighted Least Square results, which is less than  $\alpha$  at 10% level of significance thus indicating a relationship between disclosure about remuneration committee and external finance. Moreover there is a positive relation. Disclosure about remuneration committee serves as an important factor as it ensures the investors that the company has a committee, which has the task of allocating adequate compensation packages for the employees of the company, and the employees do not need to misuse the funds provided by investors for personal benefits. In cases of misuse of funds by staff due to any reasons like low salaries or poor compensation packages, the remuneration committee can be held responsible. It also gives an idea to the investors that the company has appropriate systems of control and there is proper check and balance in every area of operations. Thus this factor contributes to major hypothesis of the study that better governance leads to easily accessing external finance.

The findings indicate that there is no relation between disclosure about remuneration of CEO and board members and the external finance accessed by a firm. This hypothesis is related to disclosing the exact amount of remuneration of board members. The results are not significant for the fact that in Pakistan the shareholders and investors as a whole are mostly not concerned about checking the exact amounts of remunerations of the executives and board members by referring to the notes to the financial statements. It shows that such a disclosure about remunerations does not serve as a factor while funds providers decide upon offering their finances to a specific company. Thus disclosure of remuneration of board members although being a determinant of good corporate governance does not have any relation with access to external finance by the company.

Disclosing staff ownership being a determinant of good governance has an insignificant relationship with access to external finance. Further the results suggested that the disclosure about biographies of board members does not play any role while accessing external finance. Providers of funds don't see any difference between a company making such a disclosure and a company not making any disclosure about biographies of board members.

The p-value is less than  $\alpha$  at 1% level of significance indication the significant relationship, which has an important implication for the findings of the study as it, showed that as the size of the company increases, the need for external finance also increases. Both the Random Effect Model and Weighted Least Square Model categorize size as a important significant determinant of external finance. In an attempt to access more finance the company practices good governance. This is parallel to what the literature suggests, when the need for external finance increases, companies are expected to practice good governance.

The results of these sub hypotheses contributed positively towards the core hypothesis. Out of the seven key variables determining good governance used in the sub hypotheses, 4 determinants had significant relations with external finance. This indicates that more than half of the variables prove the relation between good governance and external finance. Furthermore the value of  $R^2$  (84%) in Weighted Least Square Model indicated that good corporate governance play a major role for companies in accessing the sources of external financing which therefore concludes that there is a relationship between good corporate governance and external finance. Moreover the F-statistic value shows the fitness of the model and its overall significance. Thus the model used has important implications for contributing towards the existing literature by verifying relationships between level of governance and external finance.

### Conclusion

The findings suggested that companies are expected to practice a good level of corporate governance when they need to access external finance. The results imply that if a company wants to attract people with funds to invest, it will have to ensure that it is good at following rules and procedures and will acknowledge the rights of its shareholders in future. The shareholders and investors see this as a guarantee and provide their finances without much stint. The major findings of the study are summarized below;

- In Pakistan although the corporate system is not well developed nor is the public much acquainted with it, still better governance procedures do play a role in regard of external financing.
- Furthermore as the size of board increases there is increased probability of independence on the board. There are more chances that the company will have a greater number of independent directors which is a sign of good governance. As a consequence of good governance external finance will be easier to access and thus external finance of the company increases.
- In addition it is imperative for a company intending to follow corporate governance in order to access external finance to make a disclosure about the remuneration committee in its annual report. This gives the providers of funds a positive view that the company has an appropriate system of control and has made some authority responsible for setting remuneration packages of its employees. This information contributes toward the positive image of the company as investors value good corporate governance and are more likely to invest their funds in the company.

- The size of the company has also been found to play a role in the process of investigating the relations between external finance and good governance practices. A larger company needs more external finance and thus practice good governance standards in order to being able to so. Thus the larger the company is, the better the standard of corporate governance is and the more there is external finance. Moreover a large company has more chances of growth and needs more external finance and for that purpose it will practice good governance in order to attract investors. Smaller and newer companies on the other hand are more likely to access other informal means of finance as for accessing external means they have to ensure public and fund providers about their credibility.
- Number of NED's on board is another important determinant of corporate governance used in this study. The public here is not informed enough to know the importance of having independent directors on board nor does the standards of corporate governance give importance to this factor while evaluating companies. It does not specify any mandatory number of independent directors to be present on the board. Thus explaining the negative relation of number of NED's with external finance.

The overall conclusion of the study is parallel to the literature. It suggests that companies do understand the importance of corporate governance while disclosing information about the company to investors. Companies that tend to generate finance externally are more transparent as they know that this practice plays a positive role in the process of accessing funds from investors. Following corporate governance standards is not only good for the proper functioning of the company but also improves the credibility of the company. In this modern age where investor protection is one of the key requirements of corporate world, following good corporate plays a vital role.

Investors are becoming more aware and knowledgeable and consider all important aspects about a company before offering their finance to them.

#### **Future Study Implications**

The given study has been undertaken with special reference to the banking and financial sector of Pakistan. The results may not apply to all sectors of Pakistan therefore future studies can be improved upon by taking into consideration other sectors of Karachi Stock Exchange. Secondly the study used data spanning over 5 years therefore additional research can be done by increasing the time period for analysis. Also, the data for corporate governance can be improved upon by incorporating more variables and thus increasing the scope of the study. Another important aspect of the study is that it has been undertaken for just Pakistan where the system of corporate governance is not so strong neither are the fund providers too acquainted with the notion, therefore the research perspective can be improved by taking into consideration markets of other countries and making a comparison so that the weaknesses in Pakistan's market can be identified and improved upon.

### References

- Akhtaruddin, M., Hossain, M. A., Hossain, M. and Yao, L. (2009). Corporate governance and voluntary disclosure in corporate annual reports of Malaysian listed firms, *Journal of Corporate Governance*, Vol. 4, pp. 21-33.
- Arping, S. and Saunter, Z. (2009). Corporate governance and leverage: evidence from a natural experiment, *Journal of Finance*, Vol. 54, pp. 34-55.
- Bebchuk, L. A., Cohen, A. and Ferrell, A. (2009). What Matters in Corporate Governance, *Review of Financial Studies* Vol. 22, pp. 783-827.
- Bebchuk, L. A. and Fried, J. (2003). Executive Compensation as an Agency Problem, *Journal of Economic Perspectives*, Vol. 17, pp.71-92.
- Bebczuk, R. N. (2005). Corporate Governance and Ownership: Measurement and Impact on Corporate Performance and Dividend Policies in Argentina, Research Network Working papers, (R-516) Inter American Development Bank
- Bebchuk, L. A and Weisbach, M. S. (2009). The state of corporate governance research, *National Bureau of Economic Research*, (Working Paper) 15537.
- Beck, T; Kunt, A. D., Laeven, L. and Maksimovic, V. (2003). The Determinants of Financing Obstacles, *Journal of International Money & Finance*, forthcoming.
- Beck, T., Kunt, A. D. and Maksimovic, V. (2004). Financial and Legal Constraints to Firm Growth: Does Size Matter?, *Journal of Finance*, forthcoming.
- Beck, T., Kunt, A. D. and Maksimovic, V.( 2008). Financing Patterns around the World: Are Small Firms Different? *Journal of Financial Economics*, Vol. 89, pp. 467-487.
- Black, B. (2001). The Corporate Governance Behavior and Market Value of Russian Firms, *Emerging Markets Review*, Vol. 2, pp. 89-108.

- Black, B., Jang, H. and Kim, W. (2003). Does Corporate Governance Affect Firm Value? *Stanford Law School*. (Working Paper 327).
- Black, B., Jang, H. and Kim, W. (2005). Predicting Firms' Corporate Governance Choices: Evidence from Korea, *Journal of Corporate Finance*, Vol. 12, pp.660-691.
- Boone, J.P., Khurana, I. K. and Raman, K.K. (2008). Audit firm tenure and the equity premium, *Journal of Accounting, Auditing and Finance*, Vol. 23, Iss. 1, pp. 115-140.
- Booth, L., Aivazian, V., Demirguc-Kunt, A. and Maksimovic, V. (2001). Capital Structures in Developing Countries, *Journal of Finance*, Vol. 56, pp. 87-130.
- Bushman R.M. and Smith, A.J. (2001). Financial Accounting Information and Corporate Governance, *Journal of Accounting and Economics*, Vol. 32, pp. 237-333.
- Business recorder, (2012). Market data- business recorder, retrieved on Nov 20,2012 from <http://www.brecorder.com/market-data/karachi-stocks>
- Demirgüç-Kunt, A. and Maksimovic, V. (1999). Institutions, financial markets and firm debt maturity, *Journal of Financial Economics*, Vol. 54, pp. 295-336
- Demsetz, H. and Lehn, K. (1985). The Structure of Corporate Ownership: Causes and Consequences, *Journal of Political Economy*, Vol. 93, pp. 1155-1177.
- Diamond, D. W. and Verrecchia, R.E. (1991). Disclosure, liquidity, and the cost of capital, *Journal of Finance*, Vol. 46, Iss. 4, pp. 1325-1359.
- Durnev, A. and Kim, E.H. (2005). To Steal or Not to Steal: Firm Attributes, Legal Environment, and Valuation, *Journal of Finance*, Vol. 60, pp. 1461-1493.
- Easley, D. and O'Hara, M. (2004). Information and the cost of capital, *Journal of Finance*, Vol. 59, Iss.4, pp.1553-1583.
- Gertler, M. (1988). Financial Structure and Aggregate Economic Activity: An Overview, *Journal of Money, Credit, and Banking*, Vol. 20, pp. 559-596.

- González, R. L, España, D. and Lopez, J. A. (2007). Determinants of Access to External Finance: Evidence from Spanish Firms. *Federal Reserve Bank of San Francisco*.
- Harrison, A. and McMillan, M. (2003). Does Direct Foreign Investment Affect Domestic Firm Credit Constraints?, *Journal of International Economics*, Vol. 61(1), pp.73-100.
- Hope, O. K., Thomas, W. B. and Vyas, D. (2009). Transparency, Ownership And Financing Constraints In Private Firms, *Journal of Accounting Research*, Vol. 46, Iss.3, pp. 591-626.
- Hyyinen, A. and Pajarinen, M. (2005). External Finance, Firm Growth and the Benefits of Information Disclosure: Evidence from Finland, *European Journal of Law and Economics*, Vol. 19, pp. 69-93.
- Javid, A.Y. and Iqbal, R. (2010). Corporate Governance in Pakistan: corporate valuation, ownership and financing, *The Pakistan Development Review*, 57:10.
- Javid, A. Y. and Iqbal, r. (2007). External Financial Resource Management by Listed Pakistani Firms, *The Pakistan Development Review*, 46: 4.
- Kashyap, A. K., Steinand, J. C. and Wilcox, D. W. (1993). Monetary Policy and Credit Conditions Evidence from the Composition of External Finance, *American Economic Review*, Vol. 83, pp. 78-98.
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A. and Vishny, R. W. (1997). Legal Determinants of External Finance, *Journal of Finance*, Vol. 52, pp. 1131-1150.
- Lehmann W. and Weigand, J. (2000). Does the Governed Corporation Perform Better? Governance Structures and Corporate Performance in Germany, *European Finance Review*, Vol. 4, pp. 157-195
- Mohanty, P. (2003). Institutional Investors and Corporate Governance in India, *National Stock Exchange of India Research Initiative*, Paper No. 15. Available at SSRN: <http://ssrn.com/abstract=353820>
- Morck, R., Shleifer, A. and Vishny, R.W. (1988). Management ownership and market valuation: an empirical analysis, *Journal of Financial Economics*, Vol. 20, pp. 293-315.

- Oliner, S. D. and Rudebusch, G.D. (1992). Sources of the Financing Hierarchy for Business Investment, *Review of Economics and Statistics* Vol. 74(2), pp. 643-54.
- Oliner, S. and Rudebusch, G. (1996a). Is there a Broad Credit Channel for Monetary Policy? Federal Reserve Bank of San Francisco, *Economic Review*, Vol. 2, pp. 3–20.
- Oliner, S. and Rudebusch, G. (1996b). Monetary Policy and Credit Constraints: Evidence from the Composition of External Finance: Comment, *American Economic Review*, Vol. 86, pp. 300–309.
- Rajan, R. and Zingales, L. (1998). Financial dependence and growth, *American Economic Review*, Vol. 88, pp. 559-587.
- Shleifer, A. R. and Vishny, W. (1997). A Survey of Corporate Governance, *Journal of Finance*, Vol. 52:2, pp. 737–783.
- Shleifer, A. and Wolfenzon, D. (2002). Investor Protection and Equity Markets, *Journal of Financial Economics*, Vol.66, pp. 3–27.
- Tariq, Y.B. and Butt, S.A. (2008). Impact of Corporate Governance Practices on Financial Performance: Empirical Evidence from Pakistan, *Hawaii International Conference on Business*, 2008 conference proceedings.